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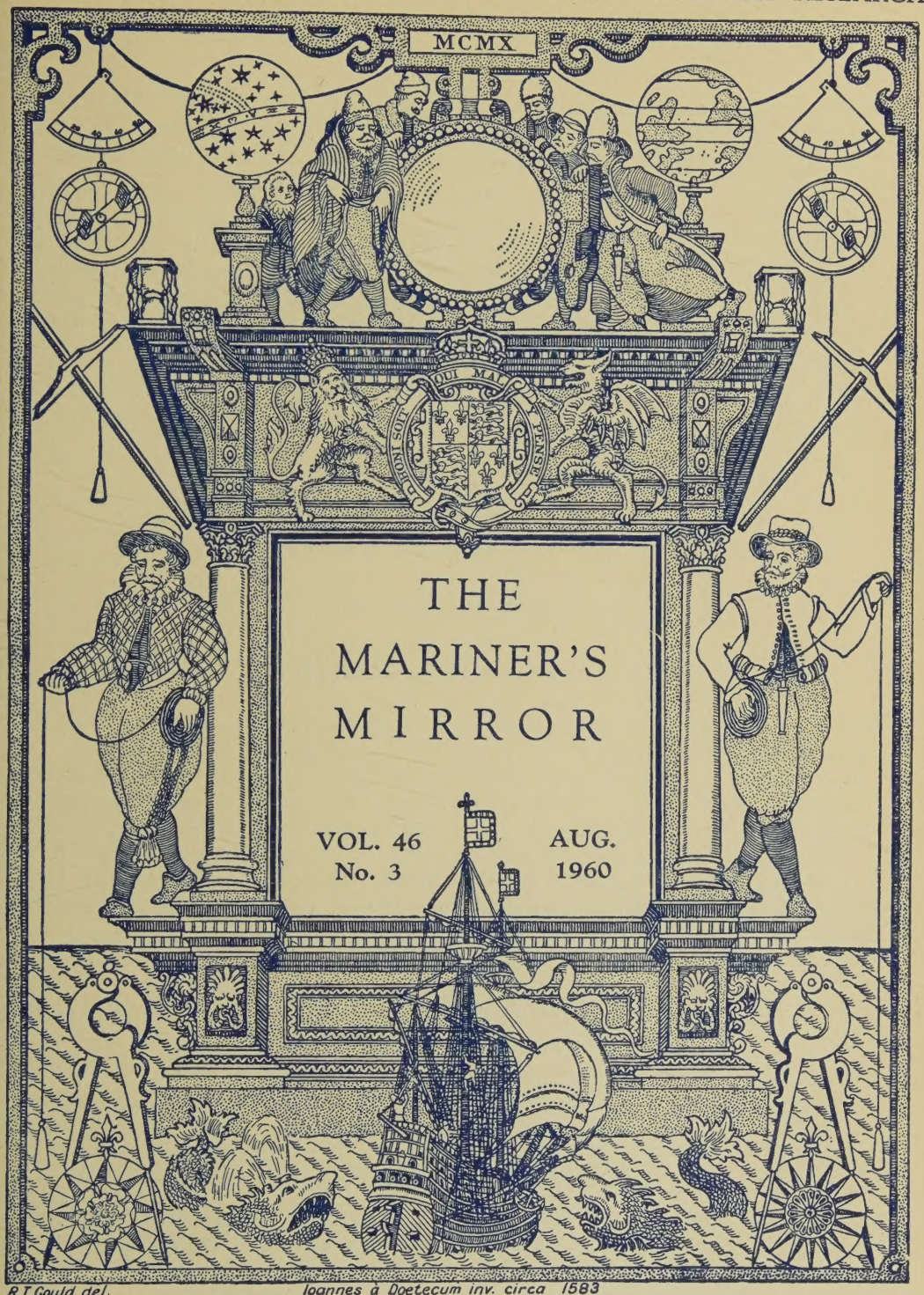

THE MARINER'S MIRROR

VOL. 46 No. 3 AUG. 1960

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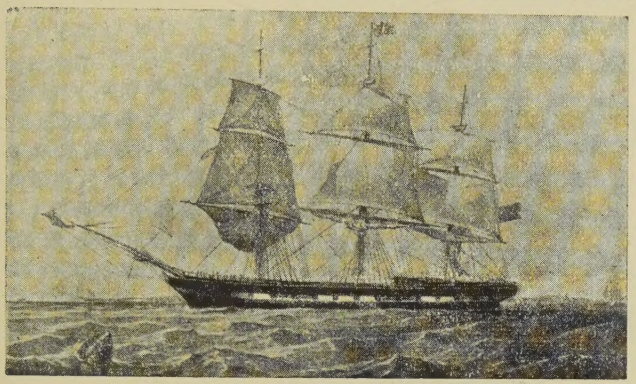

The Blackwaller *Windsor Castle* leaving Bombay 1859

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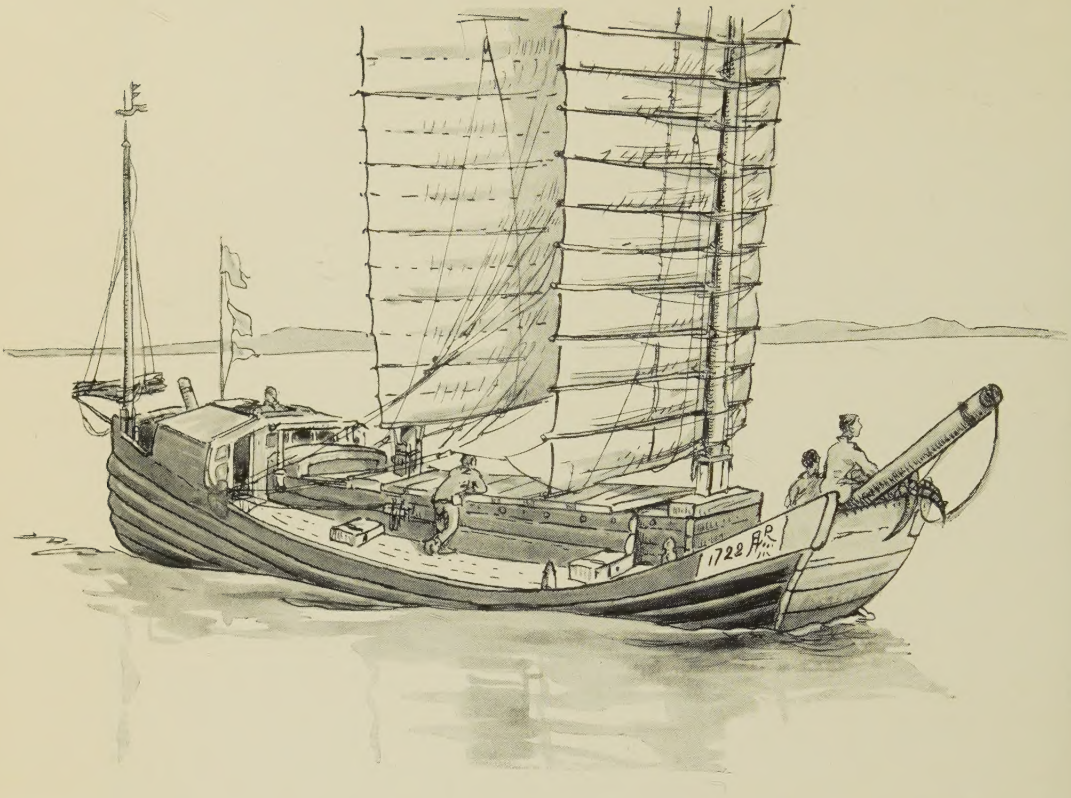


PLATE I. Northern type of Chinese Junk

(*Frontispiece*)

The MARINER'S MIRROR

WHEREIN MAY BE DISCOVERED HIS
ART, CRAFT & MYSTERY
after the manner of their
use in all ages and
among all
Nations

VOL. 46. No. 3 1960

A NORTHERN TYPE OF CHINESE JUNK

By Etienne Sigaut

With illustrations by the author

EVERY lake, stream and coastline in China finds a different type of boat constructed by those who travel upon its waters, and each variety is built and equipped to meet special requirements and different conditions. A striking evidence of this is provided by the Shantung Trading Junk which is the subject of this article.

The junks of North China are especially interesting in that they are among the oldest known types dating back perhaps a thousand years. They have been designed to operate from ports situated up rivers where grounding on shoals is not infrequent. They are, moreover, of light draught and have flat bottoms so as to permit of their being easily beached for repairs or overhaul. It would, however, be a mistake to assume that these ancient-looking vessels are unsuitable for working on the open sea. The opposite is the case.

The junk under review was registered in Tsingtau, as shown by the Chinese characters painted in white on the fore part of the hull. According to the Master, she had been built at Chinkou, a small port in Shantung, *circa* 1895. In spite of her age, she was (fifty years afterwards) still in excellent condition, which speaks for the solidity of her construction.

The outstanding features of this craft are the very low deck, which is awash amidships when the junk is loaded, and the long hatch, the top of which runs straight and does not follow the curve of the deck (see Fig. 1). Consequently the distance between the top of the hatch and the deck is greater amidships than at the extremities. The hatch coamings are therefore an integral part of the hull and form the only protection against flooding of the holds.

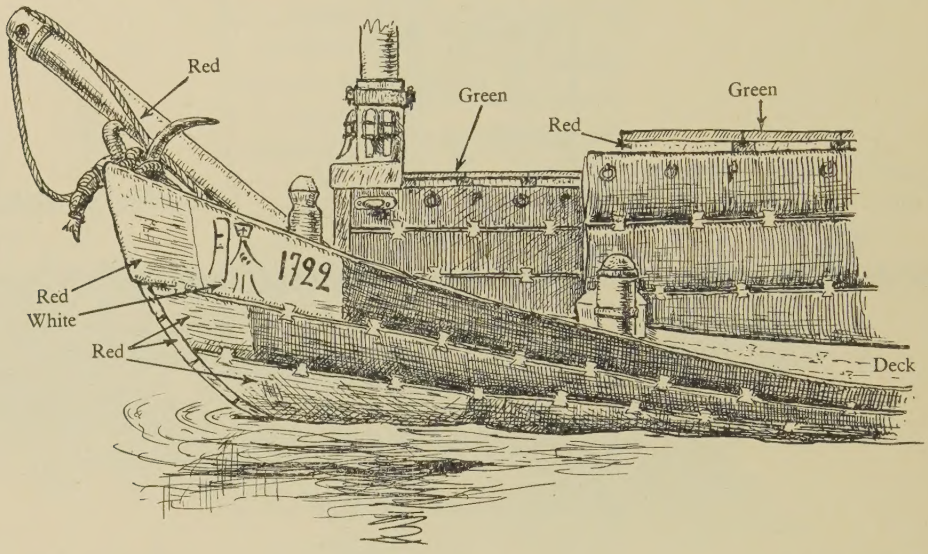


Fig. 1. The Bow.

This type of junk would seem to be very ancient, for it suggests the evolution from raft to vessel, all the more so as large rafts with slightly uncurved sides were (and probably still are) in use in the Shantung coast for fishing. When a tub or case is placed amidships for keeping the cargo and/or passengers dry the resulting silhouette is not unlike the junk under review. The great strength of the timbers in the construction of the hull contributes to the impression of an improved raft, particularly as each piece of planking is practically a squared-off tree running from stem to stern (indeed no trace of scarfing could be found in any of the hull planking). Having reached this stage of evolution from the primitive raft, it seems not unreasonable to suppose that from this prototype grew up the present turret-built Shantung–Kiangsu types, for instance it would be natural to use the top of the hatch as a deck, and the next stage would be to widen this area and build a bulwark round it. The old bulwarks would be dispensed with, the narrow strip of the original deck would be sloped more sharply and merged into the hull, thereby achieving the transformation to

the Shantung–Kiangsu type. Another feature of the junk is the method of holding the planking together by means of dog-spikes driven in from the outside. They are deeply inlaid into the planking and the hollow is levelled up with chenum. The seams are liberally filled with the same mixture so that a distinctive characteristic of this type is a series of white seams running the whole length of the black sides of the craft, intersected at intervals by the white inverted V's where the dog-spikes occur.

Construction

The over-all measurement is $63\frac{1}{2}$ ft. with a beam of 16 ft. at deck level and a maximum depth of 5 in. under deck and 8 ft. 9 in. in the main-hatch.

There are twelve bulkheads, some of which have an opening in the centre to permit passage to otherwise inaccessible parts of the hold, for example, under the crew's space in the after-end of the hold. The first bulkhead has an opening on the starboard side near the foremast. These closely spaced bulkheads provide the only transversal strength of the hull as there are neither ribs nor beams in the craft except, of course, for the light framework supporting the house above deck.

A lower, narrower hatch extends from the foremast to the main-hatch. The fore-part of this fore-hatch is covered by a strong and immovable piece of timber, higher than the rest of the hatch covers and cut out to receive the foremast and tabernacle. Its both ends are iron bound. This hatchway, abaft the foremast, gives access to a hold in which fresh water is stored in wooden tubs and tanks. In the space, forward of this hold and under the deck, some of the crew sleep in very cramped quarters. These, however, are the junior hands, as the more important members of the crew live aft, as will be explained later.

The main-hatch

The two walls of the main-hatch are, in effect, built up of half trees and pass over and beyond the fore-break of the main-hatch and overlap the fore-hatch. Another thicker baulk of timber passes through the walls of both hatches giving much extra strength. It projects a foot beyond either side of the main-hatch wall and this outside portion is bored presumably in order to receive the inboard end of the cable. The main-hatch runs right aft to the house. In an almost central position stands the mainmast which is housed in a tabernacle and braced by baulks of timber in precisely the same manner as the foremast, but in the reverse way, the after end of the mainmast leans against a bulkhead, whereas the fore-part of the foremast leans against the first bulkhead. This position of the foremast is peculiar to Northern types. About 9 ft. abaft the mainmast the level of the main-hatch

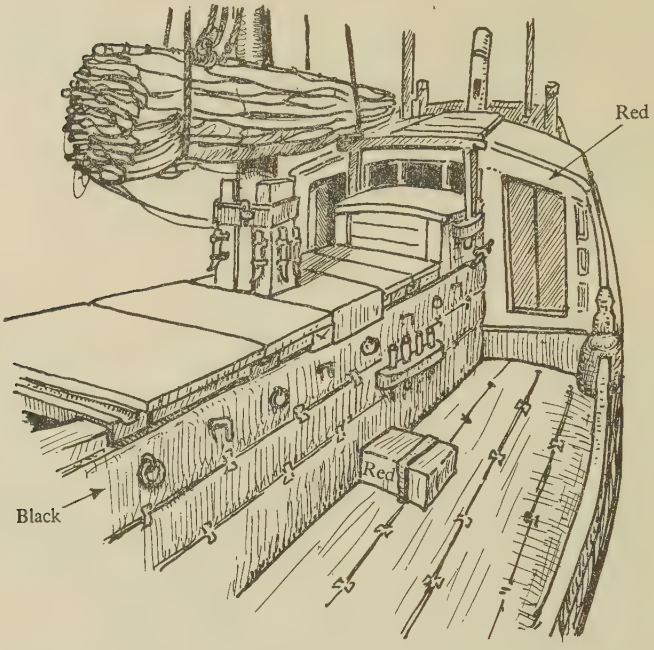


Fig. 2. The after-end.

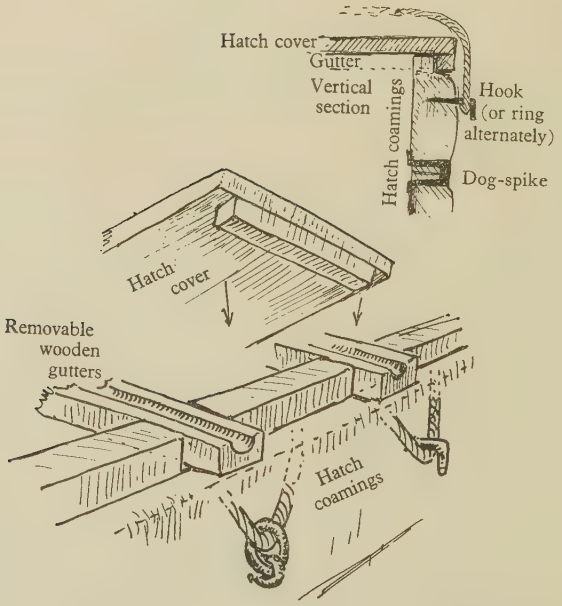


Fig. 3. Method of closing the hatch and arrangement of covers and gutters.

cover is raised by $1\frac{1}{2}$ ft. and finally ends in the break of the house (see Fig. 2). This last part of the hatch is covered with a cambered roof. All hatch covers giving access to the hold are close together. The long flanges on either side stop short a few inches before the ends so as to give room for a small removable wooden gutter which is inserted under each of the junctions of the hatch covers, the hatch coamings being cut to receive them (see Fig. 3). The external edges of the hatch covers are painted green, as are the ends of the gutters. The outside edges of the flanges are, in contrast, painted red, which makes a pleasing pattern of colour. Rings and hooks are placed at regular intervals along the upper part of the hatches through which are rove cross-ropes over the top of the hatch covers to keep them in place.

Sides

The sides consist of very heavy strakes all of which, above water-level, are rounded. The top strakes which rise and widen towards the bow act as bulwarks. These bulwarks which are only 16 in. high in the bow decrease to a few inches in height amidships. Narrow rectangular scuppers are on either side at the lowest point. Iron ring bolts are fixed on the inner side of the bulwarks at convenient intervals. The forward extremities of the bulwarks end flush with the blunt bow which is cut out to receive them. The lower strakes, on the other hand, join the bow on its inner surface. The after ends of the top strakes finish in a thick baulk of wood just forward of the break of the house.

Deck

The deck planking is joined together by dog-spikes in the same way as the hull, and rises abruptly between the fore-hatch and the bow. The deck planking continues aft inside the house and stops at the after end.

The bow is blunt and rises sharply above the waterline (see Fig. 4). Its height when the junk is light is over 6 ft. The foremost beam is pierced to receive wooden pegs which act as fairleads in the usual Chinese way. On the starboard side, a thick pole resting on the foremast partner extends beyond the bow as a fish-davit (see Fig. 5). It is iron-bound and is split at its upper extremity to receive a sheave. The sheave pin carries on its starboard side a large ring, the purpose of which is obscure. This davit is not, as might be supposed, used for the cable, but for a small rope attached to the fluke of the grapnel anchor. Just under the bow a few ringbolts are fixed in the deck for the cable-stoppers. The bow is painted red, as is also the fish-davit.

Stern

The hull proper terminates under the after-end of the house, although the side planking projects $8\frac{1}{2}$ ft. beyond where it joins a rectangular transom

which stops just below the level of the cock-pit deck which is itself 1 ft. 4 in. above the main deck. This transom is painted black, its only decoration being a green and red Yin and Yang. Below the transom the side planking continues in a curve back to the hull proper.

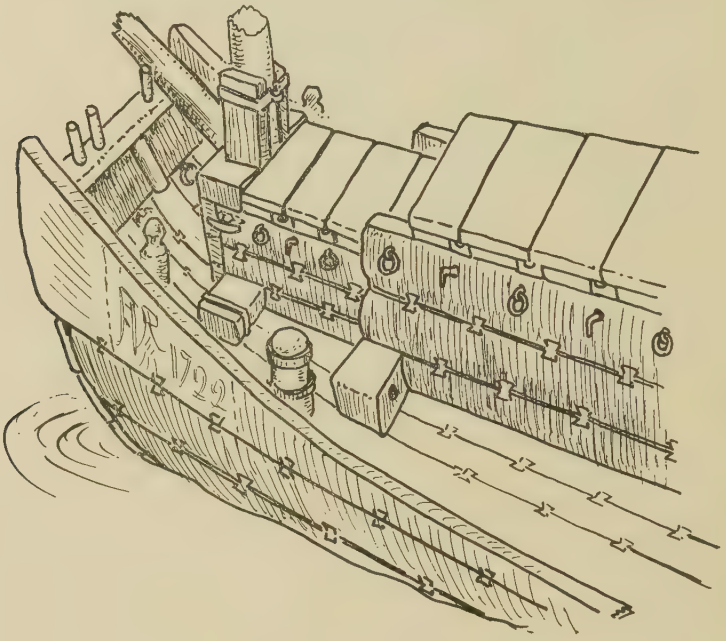


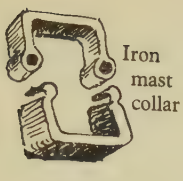
Fig. 4. The bow.

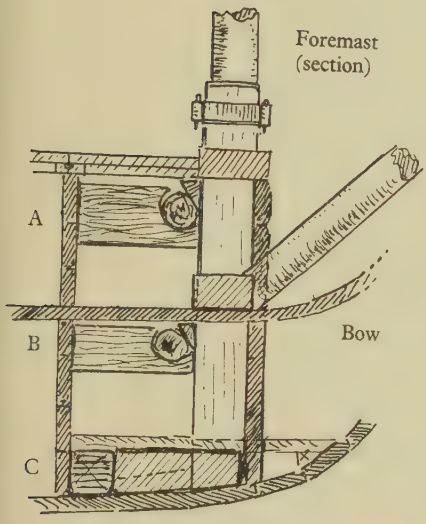
Cock-pit

The cock-pit is entirely in the overhanging portion of the stern. The deck here is divided in two by a long, narrow aperture through which the rudder can be hoisted (see Fig. 6). The heavy winch, resting in winch-bitts, crosses the cock-pit from side to side just behind the rudder-post. It is used for hoisting the rudder. The other accessories of the cock-pit are seven bitts protruding above the bulwarks: three in a line against the transom and two on each side of the winch. Finally, on the port side of the cock-pit is a little square box with a top which modestly conceals a toilet.

Rudder

The hardwood rudder is held by two solid blocks of wood fastened to the stern of the hull proper by heavy metal bolts. These blocks are cut out to receive the rudder-post, the top block being immediately below the cock-pit floor and the second only about 20 in. lower. The distance between these





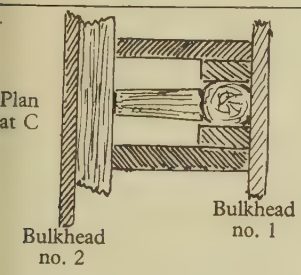


Fig. 5

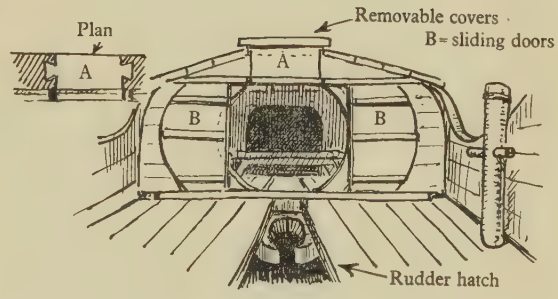


Fig. 6

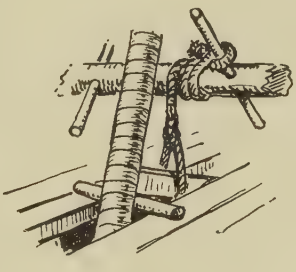


Fig. 7

Fig. 5. Fitting of the fish-davit.

Fig. 6. The house seen from the stern (looking forward). Rudder unshipped. The door is round to allow enough room, right and left of the helm when in low position. The house roof can be completely opened on top (in the longitudinal sense) to permit passing the helm from low to high position. The top hatch-covers are then removed, and piece A pushed out upwards. Inside the house can be seen the opening of the smaller compartment forward of the house; on top of it the base of the fore-windows and just above the floor, the helmsman's bench, to steer in high position with his head passing through the hatch.

Fig. 7. Method of hoisting and securing rudder in port.

blocks is governed by the length of a special aperture in the fore-part of the rudder which permits free play to the rudder when in the upper steering position. The rudder is surrounded by a strong iron-bound frame within which the planking is diagonally set. The width of the rudder is about 8 ft. or slightly less than the length of the cock-pit, so that it can be unshipped upwards—a process necessitating the removal of the winch. The rudder is not vertical but has a slight backward rake. The rudder-post is closely iron-bound from the bottom of the aperture upwards for about 5 ft. Iron bands, more widely spaced, figure again higher up. The top of the rudder blade is at right angles to the rudder-post but the foot is slanted so as to be horizontal when the rudder is shipped. Both rudder and tiller are painted with a glossy red-brown varnish.

The rudder, as has been indicated, can be used in two positions. In the higher one the tiller is in line with the roof of the house and is moved by means of a purchase on each side, the lower blocks being fixed on to a rib inside the house. The helmsman stands on a heavy bench, the legs of which exactly straddle the hatch, his head protruding through an aperture built for the purpose in the roof of the house. In the lower position the tiller functions inside the house. In order to provide the necessary play for the tiller, the door in the after part of the house is cut round in a 'moon gate', thus combining beauty and utility. In this position the helmsman usually stands on the bench, but he can also stand on deck in front of the bench, looking forward through the small window on the break of the house, although this would give a much more restricted view (see Fig. 2).

When the junk is in port and the rudder is not in use it is generally hoisted to a position still higher than the highest steering position. The top of the rudder frame then comes right through the slot in the cock-pit deck and is kept in place by an iron bar passed through the rudder aperture. This bar rests on either side of the deck across the slot (see Fig. 7). When the rudder is in this position, the tiller is generally unshipped and stowed in the house on the starboard side.

Tiller

The tiller is shaped to fit the aperture in the rudder-post, and has in addition two arms which encircle the rudder-post. These arms are bound to the tiller by wire lashings and the usual wooden pins are fitted in the fore-end (see Fig. 8).

House

The house, which occupies a space measuring just under 12 ft. between the cock-pit and the hatch, stands about 6 ft. 6 in. above the main deck, although the head room decreases as the deck slopes up towards the cock-

pit. The roof has a narrow fore- and aft-hatch running throughout its length between two stringers which serve as coamings. The planking of the rest of the roof is supported by half-beams sloping towards the sides. This hatch is closed by a series of hatch-covers of the same type as for the main-hatch, but more lightly built. The foremost of these is used by the helmsman when steering, as has been previously explained. When all the hatch-covers are removed the rudder can be hoisted from one steering position to the

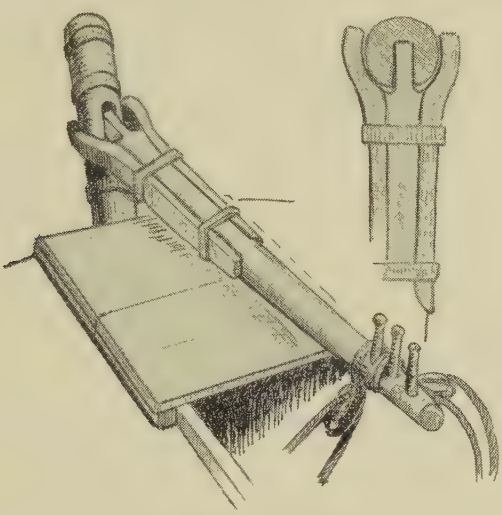


Fig. 8. The tiller.

other without removing the tiller. In this event it is also necessary to remove a dovetailed wooden section of the after part of the house frame which forms the key of the arch of the moon gate (see Fig. 6). The sides of the house converge upwards in a pleasing curve. Access to the house from the deck is through two double-hinged black-painted doors opening inwards, one on either side of the main-hatch. All the fore-part of the house is red with windows and panels picked out in green, the skirting being black. The centre of the upper panel on each side is occupied by a circular, glassed scuttle which cannot open. The central windows over the hatch are shaped to fit the house-frame. On the after end of the house the moon gate door can be closed by means of a pair of red sliding wooden panels. From a point in the centre of the house, a hatch about 4 ft. × 3 ft. opens onto the deck. It is surrounded by a 1 ft. 5 in. high coaming across the fore-part of which the helmsman's bench is straddled, as explained above. This hatchway, which is never closed, gives access to a hold. The bulkhead below the after part of this hatch is open in the centre to permit entrance to the after peak where stores are kept and surplus crew can be accommodated. In the house, on

the deck immediately behind and adjoining the hatch, is a covered rice bin which has all the appearance of being a lower continuation of the hatch. On the starboard side of the house a capstan stands on a portion of deck built up so as to make a horizontal base. This position is common in Northern type junks. The capstan bars stand in a rack nearby. A step before the moon gate leads up to the cock-pit, the deck of which is 1 ft. 4 in. higher than that of the house. There is still room for the galley which is situated in the port side. This consists of a brick stove with two fires, shelves, water and cooking-oil containers. In various other places is the rest of their gear such as movable table, oil lanterns and the thousand and one odds-and-ends without which the Chinese could not feel comfortable. Hanging up may be seen the usual Far Eastern 'oilskins' made from palm fibre which serve the double purpose of keeping the mariners dry and providing signal flags with different significations according to where and how they are hoisted aloft.

Just forward of the house the space below the raised portion of the main-hatch, covered by a fixed curved roof, is used for sleeping quarters for the senior members of the crew. It measures (outside) 6 ft. 4 in. × 5 ft. 10 in. with a height of 5 ft. 8 in. in the centre (this would mean an inside height of about 5 ft.). Its entrance is through a low door in the fore-end of the house, and its deck continues with that of the house. The men lie on the deck on mats and keep their belongings on wide shelves round the walls. Though these quarters are cramped, they are clean and orderly and the crew, according to Chinese standards, may be considered to be quite comfortable.

Anchors, etc.

Resting on the bow is a Chinese-pattern grapnel anchor. The hemp cable is attached to the grapnel by passing through the ring, down the shank and is secured to the crown, the loose end being made fast to one of the flukes by a succession of stoppings, as usual in Northern types. In addition to this grapnel, the junk had a Chinese-type anchor with a wooden stock passing through a ring at the crown. Stopping of the anchor or cable is done by means of strops and toggles.

Bitts

There are two bitts on each side of the bow and one more on either side just before the break of the house as well as the seven in the cock-pit already described.

Masts

There are three masts, all vertical. The fore and mainmasts are stepped in the centre line of the ship while the mizzen is stepped between partners

on the starboard side of the cock-pit, as far aft as it can be, and indeed behind the rudder. Opposite, in the after corner of the port side, is a vertical light pole used as a flagstaff.

Both the fore and mainmasts have a small top-mast affixed on the port side of the mast to which they are lashed (see Fig. 9). They are kept in place by two iron transversal fids, one above the other and having their ends protruding on either side. The fids also serve to support the strops for the halyards. The small topmasts are painted red and have two or three wedge-shaped chocks alternately on port and starboard sides. The truck is green and shaped like a crown. The whole (in the case of the mainmast only) is surmounted by a device typical of the Shantung junks, that is to say a long red pennant with a vertical row of small pennants above (see Fig. 9). The mizzen also carries a pennant of the same type surmounted by two small ones. The two halyard blocks on each mast are frapped forward of the masts while the topping lifts are situated aft. These topping lifts consist of a long bight of rope in which a spreader is inserted in the top, a most unusual procedure in a Chinese vessel (see Fig. 9).

Six Chinese-pattern cleats are fixed to the tabernacles of the fore and mainmasts and are iron-bound to them. A removable strong collar, made in two pieces, encircles the masts and tabernacles (see Fig. 5). Two horizontal cleats are fixed to the fore-part of the fore-hatch abaft the foremast and a set of belaying pins stand in a red rack strongly secured into the side of the main-hatch, abaft the mainmast.

Sails

The luff and the leach of all three sails are nearly on the same level and the sails are rectangular at the foot. At the head the yard is peaked. There are about twenty to thirty battens on the mainsail, and proportionately less on the other two masts. The sails, which are white, are set on the port side of the masts and have their battens on the starboard side of the sails, the battens being all parallel. The sheets follow the usual Chinese method of one sheet per batten passing through euphroes which in turn are connected to stronger sheets passing through blocks. When the mainsail is lowered its after-end rests on a horse just in front of the house.

Dinghy

The outstanding feature of the dinghy is that in appearance she somewhat resembles her parent ship. It could also be said that the dinghy is like a Chinese shoe in shape. The bow is blunt and upturned and the stern is square. The boat is partially decked in, that is to say all the bow and a

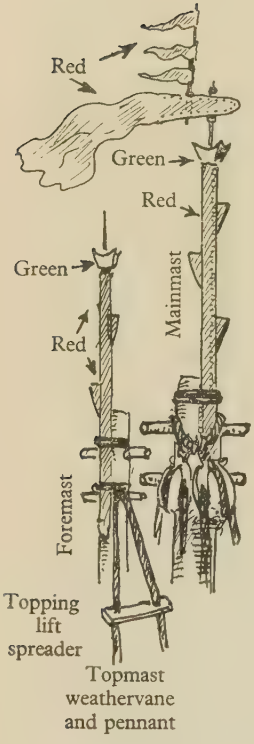


Fig. 9

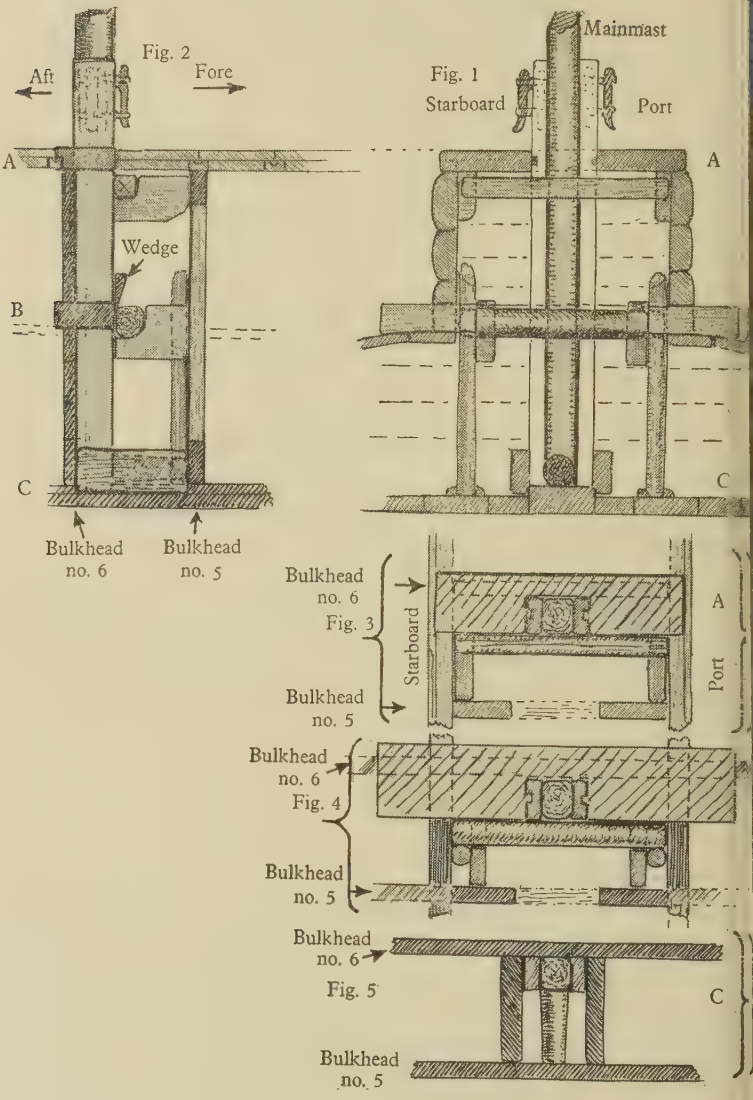


Fig. 10

Fig. 9. Details of the mast heads.

Fig. 10. Details showing how the mainmast is held at various levels. Fig. 1, section athwart ship; fig. 2, longitudinal section; figs. 3–5, plans at levels A, B and C. Bulkhead no. 5 is opened in the centre. Bulkhead no. 6 has no opening.

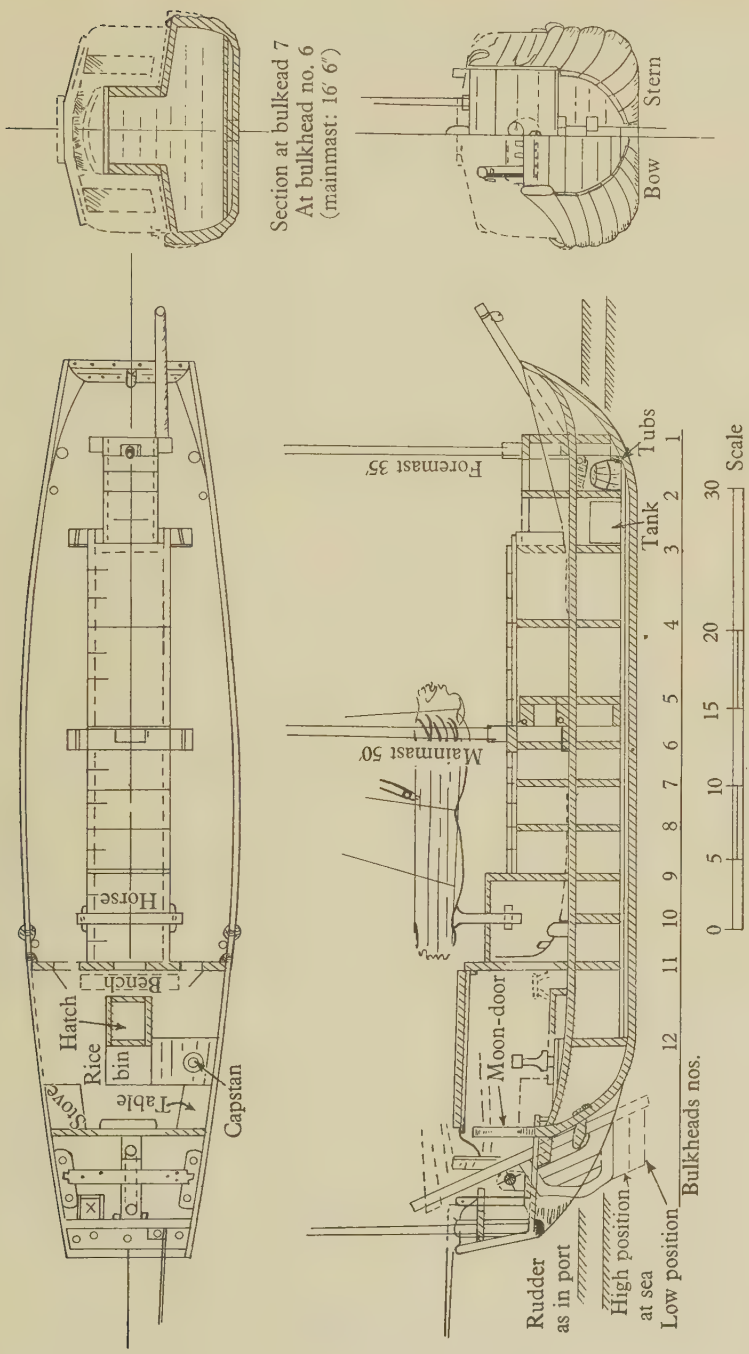


Fig. 11. Plan of Northern type junk.

quarter of the width in each side leaving a long central hatch. The bottom is flat and there are three bulkheads. The decks slope as in the case of the parent ship, and similarly the planking is fastened together by dog-spikes in the outer surface.

Conclusion

As this old type of Northern junk is exceptionally heavily built and its weight capacity is small for its size, the difference between the lines of flotation when empty and when loaded is equally small. At first sight, when seen among junks of the Ningpo, South Chekiang or Fukien types, she appears clumsy, but gains on closer examination. Not only is she interesting as a study in Chinese naval architecture but also, despite her lack of grace, she gives a satisfactory impression of strength and solidity. She is above all a striking example of the Chinese ability to build craft which are well adapted to the local conditions and trade for which they are required.

THE EARLY NORSE TRAFFIC TO ICELAND

By G. T. Marcus

A GOOD deal of obscurity surrounds the first arrival of the Norsemen off the coasts of Iceland. The honour of discovering—or, more truly, of rediscovering—that distant land has been ascribed variously to a Swede called Gardar Svávarsson, to Naddod the Viking, and to certain unnamed merchants.[1] According to the earliest and by far the most reliable authority for this period, Ari Fródi, his compatriots began to colonize Iceland at some time during the 870's and the first of them to settle there was Ingólf. 'At that time Iceland was covered with forests between mountains and shore', wrote Ari. 'Then Christian men whom the Northmen called Popes [*papar*] were here; but afterwards they went away, because they did not wish to live here together with heathen men, and they left behind Irish books, bells, and crooks. From this could be seen that they were Irish.' It would appear that Iceland had been discovered by the Irish at some date between 650 and 750; the Irish were also the original discoverers of the Faeroe Islands.[2] There is, therefore, a possibility that these

1 *Landnámabók*, ed. F. Jónsson (1900), p. 130; *Monumenta historica Norvegiae*, ed. Storm (1880), pp. 8ff., 92. Cf. Sveinsson, *Landnám í Skaftafellspingi* (1948), pp. 41ff.

2 *The Book of the Icelanders*, ed. H. Hermannsson (1930), p. 60; G. J. Marcus, 'Factors in early Celtic navigation', *Études Celtiques* (1953), pp. 321–4; and also 'The First Discoverers of Iceland', *Studies* (1956), pp. 315–16.

two sea-routes, both of them familiar to the Irish for several generations, were by them made known to the Norsemen, with whom they had been in long and intimate contact.

The *Landnámabók*, which was in part the work of Ari Fródi, though somewhat inaccurate as to certain details, nevertheless gives a sufficiently reliable report of the general outline of the Settlement. Ingólf's expedition to Iceland was followed by a great many others of the same kind. By the final decade of the ninth century the thin trickle of early emigrants (which included Ketill-Haeng, Kveld-Úlf, Skallagrím, and Grím the Hálogalander) had swollen to a broad and steady stream. The *Landnámabók* states that many of the chieftains came to Iceland in their own ships. From this and other evidence it would appear, as one would naturally expect, that a large number of the settlers belonged to seafaring families. Practically all of them hailed from coastal districts in Norway and the lands *vestan um haf*, i.e. Ireland and the Scottish isles. Many of the freedmen and slaves were Irish. Some of the chieftains were of mixed Norse and Irish stock. A large proportion came from the west coast of Norway: from Lofoten, Hálogaland, and Trondelag down to Rogaland and Agder. A smaller number—possibly thirty in all—were Swedes; and there may have been a few Danes from the Orkneys.[1] Like the colonization of the Faeroe Islands the emigration to Iceland was, above all, aristocratic in character. Several of the settlers were the connexions of kings and earls. Þórd Vikingsson is said to have been a son of Harald Hárfagri. Aevar was the grandson of Harald Goldbeard, king of Sogn. Sléttu-Björn was descended from the kings of Uppsala and Novgorod. One of the earliest and wealthiest of the settlers was Queen Aud, widow of the Norse king of Dublin. Ketill-Björn from Naumdale was the grandson of Earl Hákon. Hrollaug, who went out to Iceland on the advice of Harald Hárfagri, was the son of Rognvald, Earl of Möre. Bruni the White was the son of Earl Hárek. Ketill-Haeng was also an earl's son. Ásbjörn was the son of a chieftain of Sogn. Ketill-Þrym was a renowned chieftain of Raumsdal. The first chieftains to settle in Iceland held very large estates. Occasionally they gave away or bartered part of these lands to later emigrants.[2]

It has already been said that many of these emigrants to Iceland came of seafaring stock;[3] and to this it must be added, that many of them were Vikings, or near akin to Vikings. From the outset the Iceland venture had been intimately connected with Viking enterprise and expansion. Thus in

1 Sveinsson, *op. cit.* pp. 121ff.; Thorsteinsson, *Íslenzka Þjóðveldið* (1953), pp. 78–85.

2 *Landnámabók*, *passim*. See Sveinsson, *op. cit.* p. 67, *et passim*.

3 *Landnámabók*, pp. 138, 146, 152, 180, 195, 198, 200, 222.

the *Landnámabók* reference is made to Naddod the Viking and to Raven-Flóki, 'who was a great Viking', two of the early discoverers of the country, and of Hjörleif, who went on *vestrvíking* before he accompanied his brother-in-law, Ingólf, to Iceland; and to Ölvir barnakarl Einarsson and to Hrafn hafnarlykill, both of them renowned Vikings; to Hella-Björn, another 'great Viking', and to Þorbjörn the Bitter; to Aevar, who 'gave up Viking cruises to go out to Iceland' with all his sons, excepting Véfríd, 'who remained behind in the Viking way of life'.[1] There were Viking chieftains from the western seaboard of Norway, like Geirmund the Swarthy; and there were Viking bands which (after the battle of Hafrsfjörd) had established themselves in the lands *vestan um haf*, like those of Þránd and Saemund.[2]

The route followed by the emigrants to the havens in the west of Iceland was by way of the south coast; and so round Reykjanes and up the west coast, with the north-going current, to Borgarfjörd, Breidafjörd, and the Western Fjörds. But in the *Landnámabók* and the *Vatnsdœla saga* it is stated that Ingimund and his crew left Norway and reached Iceland, 'and had sailed the northern coast and then west, a thing never done before. Ingimund brought his ship into Hunavatnsós, and he gave all those place-names which have lasted ever since.' Later it is recorded of a certain crew, 'They voyaged to Iceland and sailed north-about round the island and stood westward to Sléttufjörd'. 'Grím . . . went to Iceland to seek for land there and sailed round the north coast.' Sometimes, as in the case of Aud the Wise, the route followed by the emigrants was by way of the Scottish isles and the Faeroes. On other occasions it is clear that the course lay across the open sea. From the time of the Settlement the dangerous south coast of Iceland was dreaded by mariners and was the scene of many wrecks; in the *Óláfs saga Tryggvasonar* it is said that there was 'nothing but sands and vast deserts and a harbourless coast, and, outside the skerries, a heavy surf'. For this reason the south coast was settled last of all.[3]

A fairly high proportion of the early voyages to Iceland appear to have been prosperous and uneventful. There is no suggestion anywhere in the *Landnámabók* that this venture was regarded as a noticeably difficult or dangerous one. On the other hand, mention is not infrequently made of

1 *Landnámabók*, pp. 130–2, 175–6, 182, 184, 214, 226. See also *ibid.* pp. 135, 168–9, 171, 177, 192, 197, 205–6, 229; *Heimskringla*, ed. F. Jónsson (1936), p. 53. Cf. Shetelig, 'Et storre Norge', *Norsk Kulturhistorie*, Bd. 1 (1938), p. 222; Nordal, *Íslenzk Menning* (1942), pp. 67–8, 71–3, 244; Sveinsson, *op. cit.* p. 47, *et passim.*

2 *Landnámabók*, pp. 135, 168, 177, 180, 182, 229.

3 *Ibid.* p. 60; *The Vatnsdalers Saga*, trans. Gwyn and Thomas Jones (1944), p. 52; *Íslendinga sögur*, ed. G. Jónsson (1947), Vol. VII, pp. 40–1; *Landnámabók*, pp. 146, 157, 201; *Heimskringla*, p. 128.

long passages during which vessels were tossed for weeks and months on the high sea, and of voyages which ended in shipwreck.[1]

The immediate occasion for the departure from Norway of a good many chieftains was the battle fought between the rival fleets of Harald Hárfagri and the coalesced kings of Hordaland and Rogaland, about 885, at Hafrsfjörd.[2] Following upon this decisive victory over his enemies, Harald had made himself master of the entire country; and many of the chieftains opposed to his rule presently left the homeland to live as Vikings in the lands *vestan um haf*, returning in the summer to harry the coasts of Norway. Later King Harald took a fleet across the North Sea and evicted his enemies from the Scottish isles. Þránd, Saemund, and a host of others sailed westward and established themselves in Iceland. It was in the years following the battle of Hafrsfjörd that a significantly high proportion of the emigrants left Norway for Iceland. Some of them were the sons of chieftains slain by the king's command; some, who failed to make good their escape, were also put to death; others, who had fought on Harald's side at Hafrsfjörd, emigrated on the king's advice.[3] But it can hardly be overemphasized that the main and decisive factor in this great movement was the remarkable progress achieved during the eighth and ninth centuries in Norse shipbuilding, seamanship and navigation.

Six centuries before the English, Germans, or Dutch, the Norsemen had evolved a craft which was admirably adapted to the conditions of Western Ocean navigation. Contrary to the commonly-held belief, this craft was not the *langskip*, or longship, of the familiar Gokstad type;[4] it was the *hafskip*, or ocean-going merchantman, which differed in several important respects from the *langskip*. It was essentially a sailing-vessel. It was somewhat shorter than the longship, and broader in the beam; it drew more water, and had a much higher freeboard.[5] The *hafskip* was clincher-built and double-ended. It was steered by a side-rudder secured to the starboard quarter (which also acted to some extent as a keel). It was propelled by one large square-sail which was spread on a yard hoisted to a mast stepped amidships. The yard was hoisted and lowered by a halyard which also served as a backstay. The lightness and simplicity of the ship's tackle were

1 *Landnámabók*, pp. 135, 157, 172, 175–6, 200, 210–11, 224–5.

2 See J. Schreiner, 'Slaget i Havsfjord', *Festskrift til Halvdan Koht* (1933), p. 103; J. Bing, 'Studier i Harald Harfagres og hans Sønners Historie', *Norsk Historisk Tidsskrift*, Bd. xxxiii, 12.

3 *Landnámabók*, pp. 168–9, 171, 175–6, 182, 216, 226.

4 This time-honoured fallacy has lately been given wide currency in Sir Winston Churchill's *A History of the English-Speaking Peoples* (1956), Vol. I, pp. 72–3.

5 Though no specimen of a Norse *hafskip* has survived the centuries, it is possible to form some conception of its general design and appearance from certain passages in the sagas, notably in the *Egils saga* and the *Vatnsdœla saga*: see *Íslendinga sögur*, Vol. II, p. 37; *ibid.* Vol. VII, pp. 40–1. See also Brøgger and Shetelig, *The Viking Ships*, trans. K. John (1951), pp. 234ff.

in keeping with the light and flexible structure of the ship's hull. Experience seems to have shown that ships of this type sailed better without any elaborate rigging.

The earliest type of *hafskip* was the *knörr* (pl. *knerrir*).[1] There is, in fact, no mention of those later types, the *búza* and the *byrðingr*. The *knörr* is mentioned in the oldest Scandinavian poetry as well as in the *Landnámabók*. Two *knerrir* are stated to have taken part in the battle of Hafrsfjörd. It was in a *knörr*, according to the *Landnámabók*, that Queen Aud voyaged to the Orkneys, Faeroes, and the Breidafjörd. The merchant Þórir went out to Iceland in a *knörr* which he had had built in the forests of Sogn. A *knörr* was also used by Grím and Kveld-Úlf for the passage to Iceland. It is significant, too, that some of the oldest place-names in Iceland were named after the *knörr*.[2] These early *knerrir* were in all likelihood evolved at some time before the close of the eighth century, during the great formative era of the *vestrvíking*, when the Norsemen were already making long voyages in the Atlantic to the Hebrides, Ireland, and the Faeroe Islands.[3]

By about 900, when the emigration was at its height, a considerable number of these merchantmen must have been engaged in the traffic, for in some years the greater part of 2000 persons are believed to have made the passage. The size of the *hafskip* tended to increase in later centuries; but even as early as the Settlement they can scarcely have been much smaller than 40 tons. When Þórólf Mostrarskegg sailed for Iceland he took with him his wife and children, a good many of his friends, his household gear, and a heavy cargo of timber. Many another *hafskip* was similarly laden with livestock and gear. The *Landnámabók* tells of the livestock which Helgi brought out to Iceland, besides his wife and children; and of a craft which 'arrived in the estuary of Kolbein's river, laden with livestock'. The ship in which Þórir Pigeon-Nose sailed for Iceland was likewise laden. Each of the two *knerrir* in which Grím and Kveld-Úlf made the voyage appears to have carried a cargo of timber for housebuilding, besides a crew of thirty men. The ship in which Aud set out for Iceland must also have been of considerable size. Apart from her family, friends, and thralls, it is stated that Aud took twenty freedmen with her; and this was presumably in addition to the usual cargo of timber for housebuilding, farm and household gear, and livestock.[4] It was with such craft as these that the great

1 The word *knörr* is found in Old Danish as *knar*; in Faeroese, as *knörrur*; also in Old Irish, as *cnarr*. *Knörr* has sometimes been rendered into English as 'cog', 'buss', and even 'galley'. All these interpretations are misleading, especially the last.

2 *Heimskringla*, p. 53; *Íslendinga sögur*, Vol. II, pp. 98, 190, 277; *Landnámabók*, pp. 138–9, 157, 200, 204, 225.

3 See G. J. Marcus, 'The Evolution of the *Knörr*', *The Mariner's Mirror*, Vol. XLI (1955), pp. 115–19.

4 *Landnámabók*, pp. 138, 152, 157, 188–9, 193.

emigration to Iceland—an event altogether unprecedented in European history—was accomplished.

About thirty-five of the chieftains, it is explicitly stated in the *Landnámabók*, came to Iceland in their own ships. The expedition of Ketill-Haeng comprised two, that of Geirmund the Swarthy four, *hafskip*. When the three sons of Þorgeir Vestarsson made the passage, each sailed in his own craft. Sometimes two emigrants owned a ship jointly. Sometimes two ships sailed in company. As in later centuries, ships were freely bought and sold. In many cases we know the name of the master, and sometimes the name of the ship is given. Mention is made of vessels which were renowned as fast sailers. Such a craft was the one which King Harald presented to Ingimund—*Stígandi*, the 'Flyer', of which it was said, that she strode over the seas.[1]

At the same time there had been a corresponding advance in Norse seamanship and navigation. Behind the plundering raids and ocean ventures of the Viking Age lay uncounted centuries of seafaring experience. The *Landnámabók* gives testimony of the remarkably high standard of knowledge and proficiency displayed by the Norse mariner at the time of the Settlement.[2] Already, *veðrkænn*, he would lie-to in some haven or under some island awaiting a fair wind; he would show much the same skill and caution when approaching the land as may be observed in the thirteenth-century sagas; he would struggle for weeks against contrary winds; in dire straits he would spread the ship's awning to catch the life-preserving rain; caught on a lee shore, he would sometimes save the lives of the crew by running the ship ashore under full sail.[3] Already, with the aid of a spar called the *beitiáss*, he was able to beat to windward.[4] Four hundred years and more before the mariner's compass was known to the Norseman he was plying to and fro across the Norwegian Sea, the only mariner in Europe to venture so far and so often out of sight of the land.[5] Judging from various

1 *Ibid.* pp. 60, 175, 184, 186, 205, 215, 217, 288; *Íslendinga sögur*, Vol. VII, p. 41.

2 Nordal, *op. cit.* pp. 53, 68, 72–3. 3 *Landnámabók*, pp. 132, 135, 138, 172, 187, 210.

4 *Ibid.* p. 131. Cf. F. Jónsson, *De gamle Eddadigte* (1932), pp. 36, 187, 236; and also *Den norsk-islandske Skjaldedigtning* (1912), B, Bd. I, p. 500. It is to be noted that the blocks for securing the *beitiáss* were discovered many years ago in the Gokstad craft; though their true significance was not understood until comparatively recently.

5 The earliest reference to the *leiðarsteinn*, or magnetic compass, in the North, occurs in the fourteenth-century *Hauksbók*: there is no mention of it in Sturla Þórdarson's recension of the *Landnámabók* in the previous century. See *Hauksbók*, ed. F. Jónsson (1892), p. 5, and *Fornsögur Suðrlanda*, ed. G. Cederschiöld (1860), p. clxxiii. It is evident, too, from the frequent allusions in the sagas to the state of *hafvilla*, that the compass was not in use in earlier times. It has been argued, indeed, by Dr Winter that the *leiðarsteinn* was known to the Norsemen of the Viking era. But he advances no convincing proof and ignores the contrary evidence cited above. See H. Winter, 'Who invented the compass?', *The Mariner's Mirror*, Vol. XXIII (1937), pp. 96ff.; G. J. Marcus, '*Hafvilla*: A note on Norse navigation', *Speculum*, Vol. XXX (1955), pp. 601–5.

significant passages in the *Landnámabók*, he was accustomed in this navigation to Iceland to rely upon a combination of dead reckoning and parallel sailing.[1] There are grounds, too, for believing that he may even have got some approximate idea of his northing or southing from a crude observation of the heavenly bodies.[2] Already, deprived of the sight of sun or stars by the heavy, overcast skies of the high North, he knew what it was to be adrift and hopelessly lost on the face of the waters: the plight of Örlyg and his men, as recorded in the *Landnámabók*, is perhaps the earliest known instance of *hafvilla*.[3] Already he was becoming increasingly familiar with the banks, deeps, rocks, and currents off the Iceland coast and with the seabirds, whales, and other adventitious aids to navigation in those waters.

For the best part of two generations the great exodus continued. The scale of the emigration, no less than the distances involved, was something new and astonishing. The *Landnámabók* has preserved the names of more than 400 chieftains of higher and lower degree, who, with their wives and families, their friends, followers, and thralls, their livestock and farm and household goods, were transported 600 miles and more across the open sea in the small, sturdy ocean-going sailing craft, variously known as the *hafskip*, *kaupskip*, or *knörr*, which, as already explained, had been evolved early in the Viking era by the genius of the Scandinavian shipwright. From the fertile vales of the Trondelag, from the wooded fells of Hordaland and Rogaland, from the fields and forests of Agder and the Vestfold, came peasant-farmers and fishers in their thousands bent on emigration. Some of these made the voyage of their own free will; others sailed away to escape from danger or oppression in the homeland. Though the great majority must have been Norsemen, there were also Gaels, Swedes, Danes, and many people of mixed descent among them. Some of the emigrants were well stricken in years, and a number of them died at sea. Vessel after vessel was crammed full of human and animal freight, lay-to for a while off the land, and then squared away, before a favouring breeze, for the distant island across the ocean. After a voyage of varying duration the coast of Iceland would at last slowly lift above the horizon; the snow-capped mountains and vast glimmering glaciers would imperceptibly grow more and more distinct; the surf-lashed beaches, undulating meadowlands, and extensive

1 *Landnámabók*, pp. 171–2, 198, 200, 209–10, 213–14. Cf. *Hauksbók*, p. 4; *Íslendinga sögur*, Vol. II, p. 251; *ibid.* Vol. VI, pp. 46–51; *ibid.* Vol. VIII, pp. 103–12. See also N. Vigeland, *Norge på Havet* (1953), p. 39; C. V. Sölver, *Vestervejen: om Vikingernes Sejlads* (1954), pp. 22–39, 104–7.

2 See *Den norsk-islandske Skjaldedigtning*, B, Bd. I, pp. 4, 668; *ibid.* B, Bd. II, p. 576. See also Falk, *Altnordisches Seewesen* (1912), pp. 19, 54; O. S. Reuter, *Germanische Himmelskunde* (1934), pp. 598ff.; Sölver, *op. cit.* pp. 131–2.

3 *Landnámabók*, p. 135.

birch-woods which at that time flourished on many parts of the coast would gradually become visible; certain well-remembered landmarks—the gigantic *massif* of the Mýrdalsjökull, the columned cliffs of the Vestmannaeyjar, the headlands of Langanes, Reykjanes, and Snaefellsnes—would help to guide them to their destined havens. Presently, while the *knerrir* lay at their moorings, the cows, sheep, goats, and horses of the settlers would be disembarked and driven off to the virgin pastures; the timber and other gear would be carried ashore, and the first makeshift dwellings erected. Some of the boldest seafarers, many of the most distinguished chieftains, a substantial proportion of the most vigorous stock in Norway and the lands *vestan um haf*, went to swell the steady stream of emigrants. The descendants of these settlers inhabit the country to this day.

NAVAL CAPTAINS AT THE OUTBREAK OF THE ENGLISH CIVIL WAR

By D. E. Kennedy

PARLIAMENT selected with care the captains of the eighteen warships and twenty-four merchant ships of the 1642 summer fleet. It directed that all officers take the Protestation, and captains who were not approved were removed.[1] Sir John Pennington, the King's choice to command the fleet, was rejected, together with, and for reasons which are not so clear, Sir David Murray and Captains Burley and Price; Burley's appointment was, however, afterwards allowed, and, by a margin of nine votes, Henry Stradling was made a captain in the Irish guard.[2] The following seamen were appointed to command the warships: William Batten, Richard Blyth, John Burley, Richard Fogge, Robert Fox, George Hatch, Thomas Kettleby, Sir John Mennes as Rear-Admiral, Richard Owen, Robert Slingsby, Henry Stradling, Richard Swanley, Thomas Trenchfield, Baldwin Wake, Abraham Wheeler, and an obscure man called Stachin.[3] In addition, Henry Bethel replaced Price, though in a different vessel; and

1 *House of Commons Journals* (*HCJ*), Vol. II, p. 456.

2 Clarendon, *History of the Rebellion*, ed. Macray (Oxford, 1888), book v, sect. 39; *HCJ*, Vol. II, pp. 474, 478.

3 He may have been the royalist Strahen, commander of the *Providence* (Clarendon, *loc. cit*, sect. 372, n. 374).

in July Brian Harrison commanded the *Vanguard* instead of Blyth, who may have had another ship.[1]

These carefully selected captains were asked early in July 1642 to obey the Earl of Warwick, who was named by Parliament to command the fleet, instead of Pennington. Five of the captains in the Downs refused to obey Warwick and prepared to resist: then, at night, Burley submitted; Fogge and Mennes surrendered when their ships were surrounded; Slingsby and Wake were captured by unarmed seamen who boarded their ships.[2] Captain Fox of the *Lion*, driven off his course for Newcastle into the Downs, refused to obey Warwick and was arrested.[3] The Commissioners of the Navy named Hill of the *Tenth Whelp* as another captain who refused to obey Warwick, but Warwick's account of these events omits him. Kettleby and Stradling, Admiral and Vice-Admiral of the Irish guard, refused to obey Parliament and planned to bring the Queen from Holland with the supplies she collected.[4] After news of their decision reached London, Warwick was directed to send ships to intercept them; the two royalists were captured in October by six Parliament ships while loading provisions at Tynemouth, although Stradling, it was reported, escaped to Ireland.[5]

Despite Parliament's care in selecting them, nine of the captains refused to obey Warwick. Most of these royalists had longer service in charge of the King's ships than the men who obeyed Warwick (so also had the officers rejected by Parliament—Murray, Pennington and Price). A survey of the naval histories of these men shows that the opposition to Warwick came from the officers who, at that time, were career seamen in the Navy: Warwick's supporters, on the other hand, formed a coterie of London merchant seamen with different affiliations. It will be argued that the removal of the royalists, who were in general the last representatives of the pre-war naval officers, changed at once the professional and social character of the group, making the Civil War a turning point in the development of the naval captain.[6]

1 *The Answer of the Commissioners of the Navy to a Scandalous Pamphlet* (1646), p. 18.

2 *A Letter sent from the Right Honourable Robert Earle of Warwicke* (1642), pp. 4–5.

3 Thomas May, *The History of the Parliament of England which began November* 3, 1641 (London, 1647), book II, p. 95.

4 J. Rushworth, *Historical Collections*, 7 vols. (London, 1721–22), Vol. IV, p. 777; *A Continuation of certain Speciall and Remarkable passages from both Houses of Parliament*, no. 12 (October, 1642).

5 *Historical Manuscripts Commission* (*HMC*), 12th Report, Appendix II, pp. 318, 321; *HCJ*, Vol. II, p. 735; *A Continuation of certain Speciall and Remarkable Passages from both Houses of Parliament*, nos. 12, 13 (October 1642).

6 Details of naval service from 1625 to 1641 are taken, unless indicated otherwise, from the fleet lists printed in *The Life and Works of Sir Henry Mainwaring*, ed. G. E. Manwaring, Vol. I (Navy Records Society, 1920), or from *The Naval Tracts of Sir William Monson*, ed. M. Oppen-

I

Sir John Mennes is the best known of those captains who supported Charles I.[1] Born in Kent in 1599, Mennes saw much service before he was 21 years old. He was captain of the *Espérance* prize in 1626, of the *Adventure* in 1628 and 1629, and the *Garland* in 1630. Mennes served continuously at sea from 1635, when he was second-in-command of the Channel fleet under Pennington, until 1639, commanding the *Red Lion* (1635), *Vanguard* (1635, 1637), *Convertive* (1636), *Nonsuch* (1638), and *Victory* (1639). In 1640 Mennes was commissioned as Pennington's Vice-Admiral in the *St George*, but in February the Earl of Northumberland ordered him to raise and command a troop of carabineers, and he remained with the Army until the end of the year. In 1642, as Rear-Admiral in the *Rainbow*, Mennes was the most senior of the royalist officers. He was knighted early in 1642.

Richard Fogge, who surrendered with Mennes, commanded the *St James* prize in the Earl of Lindsey's fleet in 1628. Fogge was one of several captains brought before the Council and charged with cowardice at Rochelle. He resigned from the service before the Ship Money Fleets, explaining that his fortune was not sufficient for his expenses in the Irish guard, 'whereof he had already experienced that the charge exceeded the benefit'.[2] Fogge commanded the *Tenth Whelp* (1633),[3] *Antelope* (1635), *Garland* (1636, 1640, 1641), *Convertive* (1637), *Entrance* (1638) and *James* (1639). In 1642 he was captain of the *Victory*, one of the largest vessels in the fleet.

After some indecision Parliament approved of John Burley. Burley[4] was evidently an experienced seaman as early as 1628 when he commanded the *Swiftsure*, the Vice-Admiral's flagship in Lindsey's fleet for Rochelle. In 1636 Burley commanded the *Fifth Whelp*, according to Northumberland's Journal, but another list[5] omits him. In one list[6] of the 1639 fleet John Burley was captain of the *Second Whelp*, but elsewhere the captain was called Richard Burley, who commanded the *Sixth Whelp* in 1638. Burley commanded the *Antelope* in 1642.

heim, Vol. III (NRS, 1913), pp. 223–4, 252, where extra details are given of the 1635 and 1636 fleets. Lists of the wartime fleets (except 1644, 1646) are printed in G. Penn, *Memorials of Sir William Penn*, 2 vols. (London, 1833), Vol. I.

1 *The Mariner's Mirror*, Vol. 26 (1940), pp. 276–85; *The Dictionary of National Biography* (*DNB*).

2 D. Matthew, *The Age of Charles I* (London, 1951), p. 270 n.

3 *HMC*, 10th Report, Appendix Part IV, pp. 280–3.

4 *DNB*.

5 Sir William Laird Clowes and others, *The Royal Navy, A History . . .*, 7 vols. (London, 1897–1903), Vol. II, p. 74.

6 *A Memorable Sea-Fight penned and preserved by Peter White* (1649), p. 9.

In 1627 Captain Thomas Kettleby, a well-known figure about Chatham, helped select pressed men for the expedition to Rhé, and sailed as captain of the *Victory*. Next year he was captain of the *St Andrew* when it was the flagship in turn of Admiral the Earl of Denbigh and Rear-Admiral the Earl of Newport. In 1635, after being appointed to command the *Reformation*, Kettleby was Lindsey's captain in the flagship *Merhonour*, replacing William Rainsborow; he sat on a Council of War this voyage with Lindsey, Pennington and Sir William Monson.[1] He commanded the *Charles* in 1636, and the *Henrietta Maria* in 1637 until David Murray replaced him. The King recommended that Kettleby be given some employment for 'the bettering of his Fortune', and Wentworth suggested in 1638 that 'some Proportion of Plantation Land of Munster' be bestowed upon him'.[2] Kettleby succeeded Sir Beverly Newcomen as Admiral of the Irish seas, and in 1642 he was captain of the *Swallow* and Admiral of the Irish guard, with Stradling as his Vice-Admiral.

Kettleby's career resembles those of the older members of this group of royalist seamen, Burley, Fogge and Mennes. Henry Stradling's career is typical of the younger men like Fox, Price and Slingsby, whose first commands were in the *Whelps* and whose sea experience was gained in the Navy rather than in the Merchant Marine. Stradling was nominated by the King to be captain of the *Tenth Whelp* in 1631, when he was about 21 years old.[3] He was continuously at sea in the *Swallow* (1635, when he forced two French warships to strike off the Lizard),[4] *Bonaventure* (1636), *Dreadnought* (1637), *Leopard* (1638), *Antelope* (1639), *Convertive* (1640), and *Lion* (1641). Stradling is named as Pennington's Rear-Admiral in the fleet guarding the Spaniards in the Downs, 1639, but John Povey, Rear-Admiral in 1640, is elsewhere described as Rear-Admiral. Stradling returned to the *Bonaventure* in 1642, the year he was knighted.

Robert Slingsby (1611–61)[5] was about the same age as Henry Stradling, and the professional development of these two young royalist officers was similar. In 1633, when he was barely 22 years old, Slingsby was appointed captain of the *Eighth Whelp*, two years after the death of his father, the Comptroller of the Navy. In the 1636 Ship Money Fleet he commanded the *Roebuck* or lesser pinnace, in 1637 he commanded the *First Whelp* and apparently also the *Third Whelp*. He commanded the *Expedition* in 1638 and 1639; another list shows him in the *Providence* in 1639. In 1640 and 1641 he sailed in the *Happy Entrance* and, finally, in 1642 he was captain

1 *HMC*, 10th Report, Appendix Part IV, p. 291.
2 W. Knowler (ed.), *Letters and Dispatches of the Earl of Strafford*, 2 vols. (London, 1739), Vol. II, p. 206.
3 *DNB*.
4 *HMC*, 6th Report, Appendix, p. 279.
5 *DNB*.

of the *Garland*, which had been Fogge's ship during the previous two years. In this last ship he conveyed the Portuguese ambassador to Lisbon in June 1642.

Robert Fox, who in 1642 replaced Price as commander of the *Lion*, sailed with Pennington aboard the *Convertive* in 1631 as one of the 'gentlemen'.[1] He was Pennington's lieutenant in the *Swiftsure* (1635) and *St Andrew* (1636). Fox was captain of the *Tenth Whelp* (1638), *Eighth Whelp* (1639), and *Third Whelp* until August 1640, when he transferred to the *Second Whelp*. The pattern of his career in the Navy is similar to that of several of his royalist colleagues who sailed in the *Whelps* before gaining commissions to larger warships like the *Lion* and *Expedition*.

Baldwin Wake is the least experienced of the captains who remained loyal to Charles I in 1642. He commanded the *Tenth Whelp* in 1640 and, probably, in 1641; in 1642 he commanded the *Expedition* after a parliamentary committee examined him.[2] Although it was cut short in 1642, his career already displayed some of the characteristics of that pattern of professional advancement which was becoming clear before the Civil War: like Fox and Stradling, Wake first commanded the *Tenth Whelp*, the vessel Fogge commanded when he returned to the Navy. During the Civil War, Wake shipped supplies between Wales and Ireland for the royalists, and, with George Carteret, was exempted from mercy in March 1649.[3]

The career of Captain Hill, who it is said commanded the *Tenth Whelp* in 1642, seems to fit this general pattern, although his identity is not clearly established. Mr Hill was lieutenant of the *Lion* in 1642, but the *Tenth Whelp* was not listed as in commission. Richard Hill commanded the *Tenth Whelp* in the service of Parliament in 1643; if this is the man who refused to obey Warwick in 1642, he cannot have remained obdurate long. Richard Hill commanded the *Providence* in 1640; but in the 1641 fleet list Phillip Hill was captain of the *Providence*. Phillip Hill was Sir Francis Sydenham's lieutenant in the *Vanguard* and then the *Lion* in 1635; in 1636 he was Murray's lieutenant in the *Defiance*.[4] He commanded the *Second Whelp* in 1636 and 1637, and the *Third Whelp* in 1639, in what is now a familiar pattern for a young naval officer. As Richard Hill appears first in 1640 and then not until 1643, and as Richard and Phillip do not appear together in the same fleet lists, it may be that there has been a misnomer. In any case, the career of Phillip Hill resembled the careers of those other young men who were making their way in the Navy before the Civil War, and who remained loyal to Charles I in the crisis of 1642.

1 *HMC*, 10th Report, Appendix Part IV, p. 277.
2 *HCJ*, Vol. II, p. 497.
3 *A Perfect Diurnall*, no. 295 (March, 1649).
4 Sir William Laird Clowes, *loc. cit.*

II

Professional characteristics similar to those of the dismissed royalist captains are found amongst those officers who were not approved by the House of Commons in 1642, and amongst other officers who were not in the fleet in 1642 but who possessed strong royalist sympathies.

The Captain Price dismissed by Parliament in 1642 was evidently Thomas Price: like Slingsby, his first naval command was the *Eighth Whelp* (1635). According to Northumberland's list, Thomas Price commanded the *Adventure* in 1636, but another list[1] described him as captain of the *Second Whelp*. He does not appear to have sailed in the fleets of 1637 and 1638. He commanded the *Mary Rose* in 1639 and 1640 until Richard Swanley replaced him; and in 1641 one of them was re-appointed commander of the vessel. 'Capt. Prysse' commanded the *Lion* in a list printed in April 1642, although the House of Commons had not approved of him in March.

Sir David Murray's career in the Navy before the Civil War resembled those of Sir Thomas Kettleby and Sir John Mennes. His first appointment to command a warship in the reign of Charles I was evidently in the second Ship Money Fleet, as captain of the *Defiance* in the Rear-Admiral's squadron. In 1635 Murray commanded the merchant ship *Pleiades* in Lindsey's Fleet. During the next few years he commanded the *St George* and the *Henrietta Maria*, in which he succeeded Kettleby (1637), *Garland* (1638), *Unicorn* (1639), *Rainbow* (1639, 1640), and *Bonaventure* (1641). Murray was an almost exact contemporary of Pennington, and in 1647 he was nearly 80 years old.

Sir John Pennington (1568?–1645)[2] served as captain of his own vessel, *Star*, under Sir Walter Ralegh's command in 1617, and commanded the merchant ship *Zouch Phoenix* in the fleet of 1620. In 1625 he was Admiral in the *Vanguard* which was lent to France. Knighted in April 1634, Pennington had a record of continuous service as a flag-officer in the Navy until the Civil War.[3] He was Rear-Admiral in the *Swiftsure* in the first Ship Money Fleet, and from October 1635 he remained in command of the winter guard.[4] In the following two years Pennington was commissioned as Vice-Admiral; in 1638 he was re-appointed Vice-Admiral, but owing to the illness of the Earl of Northumberland he was placed in command of the fleet. Pennington was Admiral of the guard of the Narrow Seas in 1639,

1 Clowes, *loc. cit.* 2 *DNB.*

3 'Sir John Pennington's Journal', 1631–36, *HMC*, 10th Report, Appendix, Part IV, pp. 275–96.

4 *HMC*, 6th Report, Appendix, p. 279.

and in 1640 he cruised as Admiral in the *James*; in 1641 he was Admiral in the *St Andrew*. Pennington's long experience equipped him to assume responsibility in 1642 when Charles I named him as Vice-Admiral in command of the fleet, but his age was a disabling factor. The King, confident of Pennington's integrity, 'and whose judgment he always principally relied on in all his maritime actions', believed him to be 'the only person immediately to take the fleet out of the earl of Warwick's possession, who had dispossessed him of the command that year which he had usually exercised'.[1] Pennington remained nominally in charge of the royalist naval forces until his death in 1645, when he was succeeded by Mennes.[2]

Besides Pennington, there were other gentlemen-seamen who left the service for various reasons before 1642, but who were royalists during the Civil War. Had these men been present in the fleet in 1642 their influence on the King's behalf might have turned the balance against Warwick, when half of the captains of warships demurred at the ordinance requiring them to defy the King. One of these officers was Sir Henry Mainwaring, a younger contemporary of Pennington and his Vice-Admiral in 1639. Mainwaring, a member of an old Cheshire family, was one of the few gentlemen who remained seamen in James I's reign, when he became a gentleman-pirate. He served Charles I both as a naval administrator and at sea between 1636 and 1640, but he was left out of the fleet in 1641 'either on account of his advancing years or strong royalist principles'.[3] At the outbreak of hostilities he took the field for the King, and in November 1642 was called a delinquent by Parliament and removed from his post as Master of the Trinity House.

Richard Feilding commanded the merchant ships *Freeman* (1635), *Jonas* (1636), and *Unicorn* (1637), in the Ship Money Fleets; in August 1637 he was instructed 'to be more reserved' when selling passes to foreign fishing vessels.[4] He was captain of the *Bonaventure* in the Downs in 1639 when the Dutch destroyed the Spanish fleet sheltering there, and was one of the captains who presented an account of the action to the Earl of Northumberland. In 1640 Feilding was employed with Stradling off the coast of Northumberland, where they captured and brought to Berwick six vessels laden with munitions. This Captain Feilding is evidently the Colonel Richard Feilding, kinsman of Basil Feilding, Earl of Denbigh, who commanded a brigade of foot under the command of Sir Jacob Astley

1 Clarendon, *loc. cit.*, sect. 377.
2 T. Carte (ed.), *A Collection of Original Letters and Papers*, 2 vols. (London, 1739), Vol. 1, p. 89: this dates his death earlier than the *DNB* article does.
3 G. E. Manwaring (ed.), *op. cit.* Vol. 1, p. 291.
4 *HMC*, 3rd Report, Appendix, p. 75.

in 1642, and who was court-martialled, condemned to death, and reprieved, for surrendering Reading to Parliament's forces in 1643. As commander of the *Constant Reformation* in the royalist fleet in 1648, he, together with Kettleby and Mennes, was described by Clarendon as 'of long experience in the service of the sea'.[1]

Charles I had only himself to blame that George Carteret[2] was not Vice-Admiral in 1642 instead of William Batten. Carteret's naval career was similar to those of Fox, Price, Slingsby and Stradling. He was 'about the same age and belonged to the same type of family grouping as Henry Stradling'.[3] He was lieutenant on board the *Convertive* in 1632, and captain of the *Eighth Whelp* in 1633 (when Slingsby also apparently commanded the vessel). In the first Ship Money Fleet Carteret was lieutenant on the *Reformation*, after exchanging his command of the *Mary Rose* with Kenelm Digby. He served at sea between 1636 and 1639, and in 1637 he was second-in-command of the Sallee expedition under William Rainsborow who had recommended his appointment. In 1641 Carteret was appointed Pennington's Vice-Admiral in the *Rainbow*. Although in the following year he was named by Parliament as Warwick's Vice-Admiral, Charles I commanded Carteret to refuse,[4] a decision which deprived the King of a valuable influence in the fleet in the crisis of 1642.

III

Few of the seamen who were well known at the beginning of the reign of Charles I—Gorges, Mervyn, Monson, and Watts, for example—were active in the Navy in 1642. Sir Ferdinando Gorges (1566?–1647)[5] was, like Monson, an almost exact contemporary of Pennington; he had been Elizabeth's Governor of Plymouth, and was 'a personification of all the Protestantism militant of her reign'.[6] In 1625, as Vice-Admiral in the merchant ship *Great Neptune*, he led the resistance of the seamen when Pennington attempted to place his force at the disposal of France. In 1642 he would have been over seventy, but despite his age he gallantly led a small royalist force in an unsuccessful attempt to gain Bristol for the King. Sir Henry Mervyn, who commanded the *St George* in 1627, was Rear-Admiral in the fleets from 1636 to 1638 and Pennington's subordinate, but he refused a command in 1639. Sir William Monson (1568?–1643) was virtually retired in 1616, so that of his last voyage (1635), he said, 'I have

1 Clarendon, *op. cit.* book XI, sect. 150.
2 *DNB.*
3 D. Mathew, *op. cit.* p. 279 n.
4 Clarendon, *op. cit.* book V, sect. 44, p. 382.
5 *DNB.*
6 J. S. Corbett, *England in the Mediterranean*, 2 vols. (London, 1917), Vol. I, p. 126.

so long left the sea,...that I am to begin the world new again'.[1] Sir John Watts, knighted for his services in the Cadiz expedition,[2] was known as one of the best seamen in England in 1626. He was captain of the *Triumph*, Buckingham's flagship, in 1627, when Kettleby commanded the *Victory* and Pennington the *Lion*.

Sir John Pennington is the doyen of the naval commanders active at the outbreak of the Civil War, and his long service career provides the link with the older seamen who sailed in the fleets of Elizabeth. Only amongst the royalist commanders of 1642 are found officers who embody a continuity of service in the Navy that had its roots in the Elizabethan tradition of seamanship. Pennington's career spans those years and sums up that tradition in the period which followed: he sailed with the Elizabethans and passed on his experience in that school to the young professionals of the reign of Charles I who, like Robert Fox, served their apprenticeship under his command.

Pennington sailed to Orinoco in 1617 and was Sir Walter Ralegh's Vice-Admiral on that ill-fated voyage. In 1620 he sailed with Sir Robert Mansell to Algiers in the fleet of which Sir Richard Hawkins was Vice-Admiral and Sir Thomas Button Rear-Admiral. Although the expedition was a typical Jacobean failure, in organization and intention this fleet points forward to Blake:[3] it can be regarded as a stage in naval development halfway between the Elizabethan and Commonwealth Navies, and it is therefore a convenient point at which to indicate how the Elizabethan tradition, which had survived into the reign of James I, was carried into the next reign by Pennington and a few others. The captains of the King's ships were: Sir Robert Mansell, Sir Richard Hawkins, Sir Thomas Button, Sir Arthur Mainwaring (died 2 April 1621), Sir Henry Palmer and Thomas Love. The commanders of the merchant ships were: Samuel Argall, Christopher Harris, Sir John Fearn, John Pennington, Thomas Porter, Sir Francis Tanfield, Sir John Hampden, Eusaby Cave (died 1 February 1621), Robert Haughton, John Chidley (Chudleigh), George Raymond, and Thomas Herbert. These men 'were probably the best at the King's disposal'.[4]

Sir Julian Corbett described Mansell (1573–1656) as an 'officer of the new school,...a gentleman of good family who had chosen the navy as a career from his youth'.[5] He was knighted at Cadiz in 1596, and served in

1 *Monson's Naval Tracts*, Vol. III, p. 363.
2 *DNB* (s.v. 'Sir John Watts').
3 *Monson's Naval Tracts*, Vol. III, pp. 94–116; J. S. Corbett, *loc. cit.* ch. VIII.
4 J. S. Corbett, *loc. cit.* p. 98.
5 *Ibid.* p. 62; *DNB*.

the Azores expedition of 1597 and in Irish waters. He had last been employed at sea in 1604, but since 1618 he had been Vice-Admiral of England for life, an office he did not relinquish until 1656. In 1642 he was at Greenwich where he had great authority amongst the seamen, but he was considered by Charles I's Council to be too old to help the King gain the fleet, and it was proposed instead to call upon Sir Henry Palmer.[1] Sir Henry Palmer sailed with Mansell in 1620 as captain of the *Antelope*; by a grant in reversion in 1617 he had succeeded his father, a naval commander, as Comptroller of the Navy.[2] He came of an old family which had been settled in Kent for some centuries. In 1642 he lived near the Downs and is described by Clarendon as loyally affected to the King, but as infirm and not able to be of service.[3] Sir Richard Hawkins (1562?–1622) was 'the personification of all the finest traditions of the Elizabethan service';[4] he was captured in the South Seas in 1594 after a defence as heroic as that of the *Revenge*. His health was impaired in 1620 and he died suddenly in the Council Chamber in 1622. Sir Thomas Button, who entered the Crown's service about 1589, also gained a reputation in Elizabeth's reign; with only a pinnace he held Kinsale in 1600 against the Spaniards until help came. He sailed to explore the North West Passage in 1612, and shortly afterwards was appointed Admiral of the King's ships on the coasts of Ireland, a position which, it is said, he held 'during the rest of his life'.[5] But Wentworth, Lord Deputy of Ireland, asked, in November 1633, that another seaman (Plumleigh) be made Admiral there: Plumleigh wrote to Wentworth in January 1634 that 'Sir Thomas Button leaves no Stone unremoved to regain the Irish Employment, to which he pretends strongly by Virtue of his Patent,...and cries out upon the Justice of the State, as if he were very injuriously suspended'.[6]

Amongst the commanders of merchant ships in the 1620 fleet there were men with Elizabethan experience including, in Corbett's phrase, 'a leaven of the best type of Ralegh's men', such as Samuel Argall who commanded the 24-gun merchant ship *Golden Phoenix*, while his colleague Pennington commanded the *Zouch Phoenix* of 26 guns. Argall was deputy-governor of Virginia and Admiral of the adjacent seas in 1617; he was knighted in 1622. During September 1625 he was Admiral of a squadron of English and Dutch ships operating on the French and Spanish coasts, and then was appointed captain of the *Swiftsure* under the command of Sir Edward Cecil.[7] Sir John Fearn and Christopher Harris had until recently been pirates like

1 Clarendon, *loc. cit.* sect. 377.
2 *DNB* (s.v. 'Sir Henry Palmer').
3 Clarendon, *loc. cit.* sect. 378.
4 J. S. Corbett, *loc. cit.* p. 86; *DNB*.
5 *DNB*.
6 W. Knowler (ed.), *op. cit.* Vol. 1, pp. 152, 180.
7 *DNB*.

Sir Henry Mainwaring. Thomas Herbert (1597–1642?), the brother of the first Baron Herbert of Cherbury, commanded the East Indiaman *Globe* in action against the Portuguese in 1616 after the captain was killed. He commanded the ship in which Prince Charles returned from Spain, and late in 1625 was appointed to command the *Dreadnought*.[1]

The commanders in Mansell's fleet belong rather to the Navy of James I than of Charles I, but most of those who were alive in 1625 kept some connexion with the Navy: Mansell was Vice-Admiral, Button was Admiral on the Irish coasts, and Pennington was Admiral in the *Vanguard*; and Argall (*Swiftsure*), Chidley (*Rainbow*), Herbert (*Dreadnought*), Love (*Anne Royal*), and Porter (*Convertive*) remained in command of King's ships. Argall died at sea in 1626—'The master of the *Swiftsure* being very backward and very cross, as the report was, to his captain Sir Samuel Argall, which broke his heart, and four days since he died'; it was reported in May 1634 that Button 'died of a burning Fever quickly, much discontented that he lost his Imployment in the Irish Seas...';[2] Chidley served until 1628 when he commanded the *Garland*; Herbert, finding that he was not promoted, retired from the sea 'to a private and melancholy life, being much discontented to find others preferred to him'; and Love, who was made Captain of Sandown Castle in 1626, died in 1627.

Only two of the survivors of Mansell's fleet commanded King's ships in the first Ship Money Fleet; Pennington commanded the *Swiftsure* as Rear-Admiral, and Porter commanded the *Henrietta Maria*, in which he also sailed in 1636. By 1637, in the third Ship Money Fleet, only Pennington of the captains of the 1620 fleet commanded a King's ship in the Navy. At the beginning of his career, Sir John Pennington had sailed with men who had learned their skills in the Elizabethan school of seamanship, and in 1642 there were few commanders in the Navy who could match his experience. His passing from the ranks of the naval captains may properly be taken as symbolizing the passing of an era.

IV

The crisis in the fleet in 1642 which led to the ejection of the royalist captains is the stage at which the character of the class of naval commanders changed, but it was the culmination of a process of change already under way. The exclusion of men like Carteret and Mainwaring, and the removal of men like Fogge and Kettleby, combined with various factors to make the outbreak of the Civil War a turning point in the history of the naval com-

1 *Ibid.*
2 W. Knowler (ed.), *loc. cit.* p. 242.

mander. The analysis of the group of royalists has suggested that demographic and other factors were altering the composition of the class of naval captains before the Civil War by removing veterans such as Mainwaring, Mansell, Mervyn and Monson from their ranks. The effects of this development became noticeable just before the period of naval expansion in the reign of Charles I, when Pennington stands out as a survivor as well as a veteran: Monson wrote that allegations of 'the insufficience of the captains and commanders' in the first two Ship Money Fleets were grounded partly on 'the death of so many commanders who lived and were employed in the Queen's expeditions'.[1]

The Ship Money Fleets represent a new phase of naval endeavour and a new type of professional seaman sailed in them; amongst the commanders in those fleets were the gentleman-captains who could sail as well as fight. These 'hybrids', it has been said, were rare under Elizabeth and 'rarer still under the Stuarts',[2] but—and this is the point—under Charles I gentlemen were encouraged to become seamen. Professor Lewis has written that 'the decade which saw the beginning of the real fashion of gentlemen-captains was the 1630's'.[3] Some of them may have deserved Monson's strictures on 'young, needy, and inexperienced gentlemen captains',[4] but as a rule they were seamen: they were men who, although bred sea-boys (like Carteret),[5] were of a gentle birth (like Mennes), which in that society set them apart from the merchant captains; and they were sponsored by the Crown, receiving special marks of attention, as when the young Mennes was commissioned to bring the court painter Peter Paul Rubens to England in 1629, or when Stradling in 1637 was sent to bring the Duchess of Chevreuse to England. This development has social as well as professional significance, and in the contemporaneous attitudes the two types of naval commander were not only distinguished but also contrasted.[6] It was, for example, claimed that a royal ship 'is a matter of too great value to be committed to the trust of any mean man', and, in words like Macaulay's, another writer drew attention to the ill effects that follow when seamen 'covet to Act like Gentlemen when Gentlemen should learn to Act like Seamen'.[7] While apparently all the parliamentary seamen of 1642 were of humble origins,

1 *Monson's Naval Tracts*, Vol. III, pp. 244–5.

2 N. Elias, 'Studies in the Genesis of the Naval Profession', *The British Journal of Sociology*, Vol. I (1950), p. 307.

3 M. A. Lewis, *England's Sea Officers* (1939), p. 195.

4 *Monson's Naval Tracts*, Vol. III, p. 435.

5 Lady Fanshawe used the words to describe Carteret (*Memoirs*, London, 1829, p. 61).

6 N. Elias, *op. cit.*

7 Ballard MSS. 52, 140–1 (Bodleian); Harleian MSS. 6003, 171 (British Museum); see G. E. Manwaring (ed.), *op. cit.* Vol. II, p. 279 f.

amongst their royalist colleagues there were seamen who can be called gentlemen.

Pennington was described by the Commissioners of the Navy, who wished to reduce his wages as an Admiral by half, as 'being but of the Rank of a Gentleman, and in all times the distance of degrees has ever been preserved for the honour of the State'.[1] Pennington came from a Yorkshire family with city connexions and his cousin, Sir Isaac Pennington, was Lord Mayor of London in 1642. Carteret, who was a baronet in Jersey, was described by Lady Fanshawe as 'the brother's son of Sir Philip Carteret, whose younger daughter he afterwards married'. Burley came from a good family in the Isle of Wight. Slingsby, who was created a baronet in 1661, was the second son of Sir Gylford Slingsby, Comptroller of the Navy; his grandfather was Sir Francis Slingsby of Scriven in the West Riding, and Sir Henry Slingsby of Scriven was his first cousin. He was made Comptroller of the Navy after the Restoration. Mennes came of a family long resident in Kent; he was educated at Corpus Christi College, Oxford, and owned estates in Bedfordshire. He became Comptroller of the Navy after Slingsby's death. Stradling (knighted in 1642?) was the fourth son of Sir John Stradling of St Donats in Glamorganshire; he was related to Sir Thomas Button, and was another case of a younger son turning to the Navy to make his way in the world.[2]

The professional future of these men seemed assured before 1642, but their devotion to the King caused their removal from the Navy: after the Restoration, Carteret, Mennes, and Slingsby returned to the service they had left twenty years earlier. During those two intervening decades there were few men of their stamp in the Navy: Sir George Ascue is a rare example, and Clarendon grudgingly admitted that he was a gentleman, but added that he 'had kept ill company too long, which had blunted his Understanding, if it had ever been sharp'.[3]

V

A trend in the professional development of the naval officer was brought to an end in 1642 when the royalist captains were removed from the Navy. The older commanders, gentlemen and seamen, and the younger men of good family who had chosen a naval career, drop out of the Navy and are replaced by commanders with little naval experience and no social pre-

1 Additional MSS. 9302, 11 (British Museum).

2 D. Mathew, *op. cit.* p. 278 n.

3 *The Continuation of the Life of Edward Earl of Clarendon*, 2 vols. (Oxford, 1759), Vol. 1, p. 478.

tensions. The well-known seamen of the Civil War were in 1642 comparative newcomers to the Navy, like William Batten and Richard Swanley, or, like William Blake and Richard Deane, were still making their careers outside it. The captains who obeyed Warwick in 1642 were closer akin to the merchant commanders than to the gentlemen-captains. Some of them were members of the Trinity House, were residents of Wapping or nearby Thames-side parishes, and were known in both these capacities to William Rainsborow: in naval terms, Rainsborow stood in relation to these men rather as his older contemporary Pennington stood in relation to the royalist captains.

William Rainsborow apparently lived most of his life at Wapping, connected with a coterie of merchant seamen and shipowners who after 1642 served in Parliament's Navy both afloat and ashore.[1] Before he died in 1642, Rainsborow, a member for Aldeburgh, was identified as a parliamentarian. Himself the son and father of seamen, Rainsborow was one of the most experienced seamen in the King's service before the Civil War. He was associated with Mansell on a Commission for manning the King's ships in 1632, and was Lindsey's flag-captain in the *Merhonour* in 1635, and Northumberland's in 1636 in the *Triumph*. The following year Rainsborow blockaded Sallee with a small fleet, and for his conduct he received a medal from Charles I (after declining a knighthood).

The seamen whom Rainsborow recommended to accompany him to Sallee were George Carteret as Vice-Admiral, Brian Harrison, George Hatch, Thomas White, and Edmund Seaman. All these men, except Carteret, 'were from Wapping or adjoining Thames-side parishes, all well known to Rainsborough and possible part owners of such ships as were hired merchantmen'. Harrison and Hatch, together with Thomas Trenchfield who joined them at Sallee, were appointed to the fleet in 1642 and obeyed Warwick.

Brian Harrison lived in Wapping where in 1620, by his marriage, he 'became related to Nehemiah Bourne, a Wapping shipbuilder and mariner... who for some years was a partner with Rainsborough in shipping ventures and was connected with him by marriage'. Harrison commanded the *Unicorn* in 1630 with letters of marque. In 1642 he commanded the *Vanguard*, and in 1647 was captain of the *Rainbow*. During the war period he became an Elder Brother of the Trinity House and was re-elected to the corporation after the Restoration.

George Hatch was owner and commander of the *Barbara Constance*, and part owner of the *Royal Exchange*, vessels in which William Rainsborow's

1 W. R. Chaplin, 'William Rainsborough (1587–1642) and his Associates of the Trinity House', *The Mariner's Mirror*, Vol. 31 (1945), pp. 182–94; *DNB*.

father owned shares. Letters of marque were issued to the *Royal Exchange* in 1626 and for several years Hatch commanded the privateer. The *Henrietta Maria* in 1642 was evidently his sole naval command. Hatch was an Elder Brother of the Trinity House.

Thomas Trenchfield commanded the *Mary Rose* at Sallee and in 1638. He was Elder Brother of the Trinity House and a privateer, and his maritime background resembled Harrison's and Hatch's. He was the Trinity House member of a board which surveyed the harbour and pier at Dover in 1640, was captain of the *Unicorn* in 1642, and died in 1646, after his appointment as Vice-Admiral in the *Rainbow*.[1]

Although Rainsborow recommended Seaman for the *Expedition*, another list showed him in the *Providence*, while Carteret's Journal (April–October 1638)[2] showed Robert Slingsby in the *Expedition*. Seaman, however, commanded the *Providence* in the Ship Money Fleets of 1638 and 1639. Thomas White, who lived perhaps at Deptford, was an old associate of Rainsborow. He was master of the *Rainbow* in the first Ship Money Fleet. During the Civil War he 'became Admiralty Agent at Dover and afterwards a surveyor of ships for the Navy Board', and was an Elder Brother of Trinity House after the Restoration.

Rainsborow's choice of his subordinates, merchant seamen and shipowners who afterwards supported Parliament, illustrates how his mercantile interests and affiliations differed from the more professional position and influence of Pennington: in this connexion it is significant that Rainsborow, unlike Pennington, rejected a knighthood. Professionally as well as socially, Carteret, the new type of naval commander, stands outside this group, and he seems to have felt his loyalty drawn to Pennington rather than to Rainsborow. During the Sallee voyage he wrote secretly to Pennington, who passed the letter on to Secretary Nicholas with this illuminating comment:[3] 'An enclosure from Captain Carteret will unfold that business at large. I perceive he neither dares write to you nor me, but covertly; for these were consigned to a friend in London, and from thence to me, though they come over with the same ship that brought our Admiral's, and laid here some time. You will find that all things are not true that Rainsborough writes.' It is interesting that Pennington gave more credence to Carteret's version of events than to Rainsborow's.

William Batten,[4] Vice-Admiral of the fleet in 1642, is the best known of this group of parliamentary seamen; like most of them his career began in merchant ships. Clarendon describes him as 'an obscure fellow, and

1 *HCJ*, Vol. IV, p. 450.
2 *HMC*, 6th Report, Appendix, p. 308.
3 Quoted by W. R. Chaplin, *loc. cit.* p. 185.
4 *DNB*.

(though a good seaman) unknown to the navy' before 1638, a man of 'no breeding but that of a common mariner, from whence he came to be master of a ship in the service of the merchants'.[1] Batten obtained letters of marque for the *Salutation* of London in 1626; and a Captain Batten commanded the *Third Whelp* in 1628, but it is generally held that William Batten's record of naval command began in 1638 when he was captain of the merchant ship *Confident*. Batten was able to afford the office of Surveyor of the Navy in 1638 when the purchase price was £1500. He next appeared in the Navy lists in 1642 as captain of the *St George*. He served as Vice-Admiral in the *St Andrew* and *Leopard* during the Civil War, until he joined the revolted ships in 1648 in the *Constant Warwick*, of which he was a part owner. He was an Elder Brother of the Trinity House.

Another comparative newcomer to the Navy was Richard Blyth whose first command of a warship was the *Leopard* in 1641. Parliament approved him in March 1642 as captain of the *Vanguard*, but Harrison was commanding the vessel in July. Blyth was flag-captain on the *Prince Royal* in 1643. The House of Commons, considering the officers to serve in the fleet during 1644, left it to Warwick to discharge or employ, amongst others, Richard Blyth and Richard Blyth junior.[2] No more is heard of Blyth junior, but Blyth senior was flag-captain on the *James* in 1645. The House of Commons refused to re-appoint him in 1646.[3]

Henry Bethel is not amongst the officers of whom the Commons approved in March 1642, but in July he was captain of the *Mary Rose*, evidently his first charge of a warship. He commanded the *James* (1643), *Bonaventure* (1645), *Leopard* (1646), and *Garland* (1647). Bethel was Rear-Admiral in the *Garland* in 1648, and left the service by the time of the naval revolt.

In 1640 and also, perhaps, in 1641, Richard Swanley commanded the *Mary Rose* and like, Bethel and Trenchfield, too, this seems to have been his first naval command; like them, too, he rose to flag rank in the Navy and left it by 1648. Swanley commanded the *Charles* in 1642, and during the next two years sailed in the *Bonaventure* as Admiral of the Irish guard. He was also afloat in the *Leopard* early in 1644. In June of that year Swanley received the thanks of the House of Commons and received a gold chain for his services: a newspaper reporting the award stated that Swanley 'hath a spirit made fit for revenging the blood of the poor Protestants in Ireland'.[4]

1 Clarendon, *History of the Rebellion* (Oxford, 1888), book v, sect. 44, 377 n.
2 *HCJ*, Vol. III, p. 447.
3 *Ibid.* Vol. IV, p. 450.
4 B. Whitelock, *Memorials*, 4 vols. (Oxford, 1853), Vol. I, p. 263; *Mercurius Britanicus*, no. 39 (June 1644); *DNB*.

He commanded the *Lion*, and also apparently the *Leopard*, in 1645. In 1646 Bethel commanded the *Leopard* and Moulton senior the *Lion*, as Swanley had been suspended until he cleared himself of certain charges.[1] He sailed as Admiral of the Irish guard in the *Lion* in 1647 until, in September, John Crowther was approved as commander-in-chief of the Irish guard.[2] Swanley had left the sea by November 1647 and lived at Limehouse until his death in 1650.

Richard Owen is apparently the only one of this group of parliamentary seamen who commenced his career as a lieutenant like the royalists Fox and Hill. Owen was Sir Henry Mainwaring's lieutenant in the *Unicorn* in 1636, when Fox was lieutenant in the *St Andrew*. Owen served under Sir Beverly Newcomen in the Irish guard in 1637, and Northumberland recommended that Owen succeed Newcomen 'in the Admiralty upon this Coast', subject to Wentworth's approval. There were evidently queries about Owen's fitness for the position, and in March 1638 Northumberland protested to Wentworth that 'when I recommended Captain Owen to serve under your Lordship, I thought him a very orderly young Man; if he prove otherwise, I shall be a most earnest Suitor to your Lordship to turn him out of his Imployment'.[3] In the event, Kettleby succeeded Newcomen, and Owen served in the Irish guard in 1639.[4] Wentworth granted to Owen 'the keeping of the Fort of Castle-Park near Kinsale', worth less than £10 a year. Owen commanded the *Entrance* in the Narrow Seas in 1642. He was Batten's Rear-Admiral in the *St George* (1643), in the *Garland* (1645), and in the *Henrietta Maria* (1647). In 1645 he was made Commander of Sandown Castle.[5] Owen had left the Navy by 1648.

Abraham Wheeler also served in the Navy before 1642. In 1636, when Owen was a lieutenant, Wheeler was master of the *Greyhound* under the command of Robert Turner. In 1638 Wheeler was made captain of the vessel which he commanded until 1644, when he was discharged by Warwick for insubordination and neglect.[6] In October 1647 the House of Commons appointed him commander of the *Hind* frigate.[7] In 1648 Wheeler was captain of the *Cygnet*. He commanded the *Expedition* in 1649.[8]

1 *Minute Book of the Committee for the Admiralty and Cinque Ports 1646–1648*, Admiralty Papers 7/673, 4, 13 (Public Record Office).
2 *HCJ*, Vol. v, p. 317.
3 W. Knowler (ed.), *op. cit.* Vol. II, pp. 49, 51, 78, 155, 190.
4 *Ibid.* pp. 206, 361–2.
5 *Order Book of the Committee for the Admiralty and Cinque Ports* 1645, Rawlinson MSS. C 416, 57 (Bodleian).
6 *Calendar of State Papers Domestic*, 1644, p. 555.
7 *HCJ*, Vol. v, p. 328.
8 Additional MSS. 9300, 116.

There is a general similarity between the naval careers of these seamen, Batten, Bethel, Blyth, Harrison, Hatch, Owen, Swanley, Trenchfield, Wheeler: most of them joined the expanded Navy in the late 1630's and all (except Wheeler) had left when the second Civil War occurred. Within that period five of them achieved flag rank; Swanley in 1642, Batten and Owen in 1643, Trenchfield in 1646, and Bethel in 1648. In addition, William Smith, Batten's lieutenant in the *St George* in 1642, was Swanley's Vice-Admiral in the Irish guard in 1643 and 1644, receiving a gold chain for his services.[1] Although their period of naval service spanned a decade, it was for them only a part of their professional activities as seamen: they were merchant seamen like their colleagues in the twenty-four merchant ships commissioned in 1642. Their affinity with the merchant shipowners contrasts them with the royalists, the career officers in the peacetime Navy.

There is a clear distinction between the royalist and parliamentary naval commanders in 1642, and the removal of the former effected a change in the general character of the officer class. The break in its continuity can be illustrated by a brief comparison of the dates at which seventeen of the eighteen captains of royal vessels in 1642 first commanded a warship. Six of the nine royalists had been in the Navy before the first Ship Money Fleet; the dates of their first appointment to command warships are as follows: Mennes (1626) and Kettleby (1627) were most senior, followed by Fogge and Burley (1628), Stradling (1631), Slingsby (1633), Hill (1636), Fox (1638), and Wake (1640). After the removal of these men there was not a captain in the fleet who had been in charge of a warship before Trenchfield (Sallee, 1637), or Wheeler (1638); although William Smith, lieutenant of the *St George* in 1642, commanded the *Tenth Whelp* in 1635 with, wrote Monson, diligence and ability.[2] Five (six, if Stachin is included) of the nine parliamentary commanders in 1642—Batten, Bethel, Harrison, Hatch, Owen—had not commanded warships before, but some of them had served in the Navy in different capacities; Owen as lieutenant in the second Ship Money Fleet, Hatch and Harrison as commanders of armed merchant ships in 1637, and Batten in 1638. All of these newcomers obeyed Warwick and, except for Hatch, they all appear again in Parliament's fleets. In these terms the split in the ranks of the naval commanders in 1642 appears as the difference in the attitude of seamen new to the Navy and veterans who for the most part had entered the service a decade earlier.

1 B. Whitelock, *loc. cit.*
2 *Monson's Naval Tracts*, Vol. III, pp. 373–5.

THE *MARY GONSON*

By R. C. Anderson

TOWARDS the beginning of his article on the Venetian *Roccafortis* (*M.M.* 1956, p. 267) Laughton mentioned the *Mary Gonson* as being an early sixteenth-century ship whose dimensions are known in enough detail to give a fair idea of her design. The first trace of this ship and of the document dealing with her building was in a note by Laughton on a mysterious fitting called the sherwyn in the *M.M.* of 1932 (p. 326), but there is no doubt that he knew of the document before giving his lecture on the *Henry Grace a Dieu* in February 1931. Certainly he had shown me a transcript of it before the end of that year.

One of the more startling suggestions in that lecture had been that the *Henry Grace a Dieu* in her first state had an external 'blister' or belt of timber sufficient to bring the total thickness of her side at the waterline up to 5 ft. or even more. Laughton returned to the subject in an article on Hull Protection in 1940, and then quoted parts of the *Mary Gonson* document as helping to prove this. In the next issue I wrote that before accepting the idea of 'blistering' we ought to know more about the *Mary Gonson* and her dimensions. 'The specification might perhaps be printed as a Document in the *M.M.*'

Nothing came of this, probably because Laughton was by then acting as Admiralty Librarian and had no time for nautical archaeology, but fortunately he left among his enormous mass of papers an annotated copy of the actual document, together with a long study of its implications and a number of illustrative diagrams. Some of this he had used in his article in 1940 and the rest goes off now and then into side issues. What is now printed is only a selection, but I hope a fair selection and one wide enough to do justice to the original writer.

Here, then, are Laughton's introductory remarks followed by the text of the document and his notes on it.

Until recently we had no known documentary evidence for the dimensions and proportions of any ship of the early Tudor period. For the ships of Henry VII we still have not even the reputed tonnage; for those of Henry VIII we have statements of tonnage, varying greatly in different lists, but no knowledge of the method by which those tonnages were estimated.

In the circumstances the discovery of a State Paper (S.P. 1/230, f. 201 *sqq.*) giving a fairly complete specification of the dimensions to be followed in building a ship of considerable size is of great value. The figures given in this paper allow the sheer draught to be reconstructed with some confidence and the deck plans perhaps somewhat less confidently; but they tell us nothing of the scantlings of the ship and nothing directly of the form of her under-water body.

The specification is among those papers which were not found in time to be listed in the original edition of the *Letters and Papers of Henry VIII.* It is now bound up in one of the supplementary volumes (no. 230) of recently discovered papers and is listed in the revised edition of *Letters and Papers*, in which, however, it is undiscoverable from the index. It is grouped with other naval papers under one entry, all being assigned to the year 1514. This date may be accepted as approximately correct, for the ship is in all respects similar to those which fought in the French war of 1512–14; but it must be understood that the specification may in fact belong to any date in the first dozen, or possibly even the first twenty, years of the reign. The signature of William Gonson, which it bears, gives it authority; but, owing to the length of Gonson's service, does not help us towards a precise date.

The document is partially in duplicate, the partial version being perhaps a fair copy which was not completed or one of which all but the first page has been lost. There is no difference, save a few minute discrepancies of spelling between the partial and complete copies. The second, which begins at f. 203a, differs from the first in having a title and in being signed by Gonson. The title, which is simply 'The Mary', has been cramped in, evidently as an afterthought. Gonson's signature is on the dorse of the last page, and comparison with other specimens of his writing convinces me that not only is it a signature, not the name of the addressee but also that the specification and probably the incomplete fair copy too are his holograph.

The document follows at length:

The Mary

The lengte off the Shyp	
The Kele by Sqwyar[1]	80 footte
and to Rak forward	27 foottee
and to Rak aftward	8 foottee
The Somercastell	56 foottee
The Forcastyll fro the Steme aftward	18½ foott
and from the Steme to the Sherwyn[2]	8 footte

1 This probably means for as much of its length as it is square in section, thus excluding the scarf with the stem. The 'square' length would therefore be the length to the touch, including the thickness of the sternpost.

2 As yet unexplained. Inventories show that it was a fitting connected with the securing of the main stay (see *M.M.* 1932, p. 326).

The Bredyth

The Midshipe beme of the nether overloppe	32 footte
The Beme at the Lofflow[1]	30 footte
The Beme a boute the Capsten[2]	29 footte
The Sterne beme[3]	20 footte

And the upper overloppe to be at the same bredyth in every place, and in midwey betwene the two overloppis to be broder by iij grete footte[4] than at the bemes throw the shipe.[5]

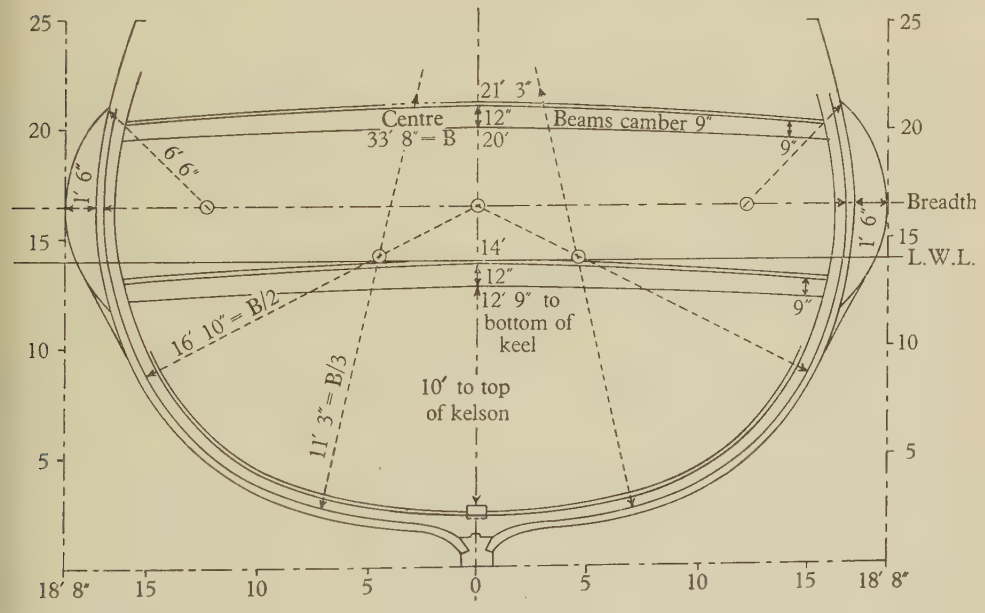
1 Lof-lieu, the place for the tack, the chesstree. In the Bayonne ship of 1419 this beam was called 'the beme of the hameron afore', the word 'hameron' being derived from the Spanish 'amura', tack.

2 Matthew Baker, in *Fragments of Ancient English Shipwrightry*, calls this the Quarter Beam and gives a method for determining its position.

3 Presumably the deck transom; but the term has not been found thus early. Possibly the wing transom.

4 I understand this to mean 'full 3 ft.', not that two different kinds of feet were in use.

5 This probably means 'throughout the ship', not that the beams projected through the side as in Mediterranean practice.



Dimensions:		*Scantlings:*	
Keel to touch	80′ 0″	Keel	16″ × 16″
Touch from ⊕	26′ 8″	Kelson	7″ × 9″
Main beam	32′ 0″	Timbers	6″ moulded
Breadth moulded	33′ 8″	Standing strake	6″
Depth, kelson to beam	10′ 0″	Plank	4″
Draught at ⊕	14′ 0″	Ceiling	2″

The Mary

The Somercastell Bredythe	
The Gutterlege[1] within the tymber	31 foott
About the capsten within the tymbers	30 foott
And a bafft within the tymbers	21 foott
And the other deks to followe after the rate and to be well gaderyd in and not flakyng[2] a brode	
The Byttbeme[3] within the tymbers	27 footte
The Bredyth at the Forcastill	
At the Kowbrygehed[4] within the tymbers	19 foott
and over the Steme within the tymbers	10 foott
and on the flore[5] to be so brode as ye shall thynk besst.	
The heyghtt of the Shyp	
The halse	[blank]
The Sterne poste	26 footte
From the Keelswayn to the Midshypbeme	10 foott
From the lower overlope to the carlyn[6] of the upper overlope	6 foott
From the upper overlope to the carlyn of the Somercastell	5 foott di
From the Somercastell to the legis[7] of the dek[8]	5 footte 9 ynchys
From the dek to the legys of the poope	5 footte 10 ynchys
From the Byttbeme to the floore of the Forcastell[9] unther the legys	6 foott[10]

The plank to be iiij ynchys thyk, and the Shyp to be calkyd with hemp. And to make upon the nether overlope ij porttes on every side, and ij in the stern on the same overlope. And upon the upper overlope in the stern ij porttes. And that the porttes be in bredithe xxxij ynchys, and in lenghtt xxvij ynchys. And that the lowest partt of the porttes on the nether overlope be ij footte and iij ynchys from the nether overlope, and that the lowest part of the porttes in the stern be butt on footte from the overlopes.

And that ther be no pyche leyd unther water upon the shyp but all rosyn.

1 From its length this is evidently a thwartship waterway at the fore end of the Somercastle. It seems curious that the term Somer beam does not occur.

2 In later phrase 'flaring'.

3 This is the great beam inside the forecastle arch which is so much in evidence in early pictures of carracks. There is nothing here to show that in English ships at this date its ends were carried through the ship's side.

4 The spelling shows the origin of 'cubbridge' to be the German *koebrug*, not the Spanish *cubierta*. See *M.M.* 1913, p. 317.

5 This is not clear. By its position in the list it would be expected to refer to the forecastle, the width of whose floor is otherwise determined by the dimensions already given. But coming at the end of the list of breadths it may refer to the floor of the ship.

6 The upper overlop was laid on beams, not merely on carlings and ledges: presumably the distance is given to the carling because it projected below the beams.

7 Ledges; therefore perhaps the deck was not carried on beams. The point is of some importance because, in that case, it cannot have carried guns of any considerable weight.

8 This is the strict and original use of the term.

9 Note that 'under the forecastle' means what later would have been called 'in the forecastle', which had the fore part of the upper deck for its floor. What is here 'the forecastle' is really the 'upper forecastle' or later the 'topgallant forecastle'.

10 As the bitt-beam must have risen to some height, possibly 3 ft., above the orlop, the headroom under the forecastle was probably about 9 ft.

And that the shyp be made redy by yow so myche as [belongs][1] to carpenters and callcars crafft, as well tops, cabons, as pavesys.

And that she shall have a Botte and a Cok suffycyent for suche a shyp, and her mastes sett.

And that ther be in the nether overlope xij bemys,[2] and on the upper overlop so many as ye shall thynk convenyentt.

And that ther be a mayne capsten and a wheele and in the forecastell a capsten.[3]

(Endorsed) Wylliam Gonson.

The portion of the document on which Laughton based his theory of 'blistering' was that which lays down that the beams of the two decks (using the term in the modern sense) were to be equal in length and that half way between them the ship was to be '3 great feet' wider. There is no need to decide whether this means '3 ft. full' or 3 ft. of perhaps 13 in. or so, for the result would be much the same; the question is, what exactly does the specification mean and could it be carried out without adding a belt of timber outside the ordinary planking?

It cannot have been simply a matter of shaping the timbers so as to make them bulge outwards 1½ ft. in a height of 6 ft.; an attempt to draw such a section shows that at once. It must be that the lengths for the beams were to be taken inside the timbers and that for some obscure reason the width of the hull just above the waterline was to be measured outside everything.

Laughton reasoned as follows: 'The Main Beam which Gonson gives is 32 ft. This is not the full breadth nor in its position. The breadth *moulded* adds 6 in. (twice) for the timbers and, say, 2 in. each side for the outward curve to the mid-point between the orlops—this totals 1 ft. 4 in. Also 4 in. (twice) for thickness of plank and 3 ft. for the girdling on both sides. Thus the breadth of the hull proper is 34 ft. and over the girdlings 37 ft.'

In his diagram (now reproduced) he makes the curve between the orlops 4 in. instead of 2 in. and thus reaches a total width of 37 ft. 4 in. On the back of this diagram he wrote: 'I am not satisfied about the girdling. Did Gonson mean that the total of 3 ft. which he allowed for it was to be measured outside the timbers and plank or that it was to include at least the plank? As a protection it could not have included the timbers, even if the whole number of the futtocks had been carried up to the height of the upper orlop, which is hardly likely, for the timbers, though closely spaced, cannot have covered more than from 2/3 to 3/4 of the side of the ship; but if the thickness of plank only (4 in.) is to be allowed for, then the additional thickness

1 Paper torn.

2 Were these beams distributed through the whole length of the overlop or did they extend only to the Gun Room with a rise there? If so, were there other beams under the gun room or how was it supported to bear the weight of the guns, which at this date would almost certainly be 32 prs.? Also, would the height of the sternpost allow of a rise aft? I very much doubt it.

3 See note 9, on p. 202. It would be possible to put a small capstan in the upper forecastle, but the housing of the bow-sprit would make it quite impossible to put one 'under the forecastle'.

of the girdling on each side should be only 1 ft. 2 in. and the over-all breadth is decreased by 8 in.'

Pencil notes on the draught were that the 'Breadth moulded' was rather 'outside the plank' and that the Rail was probably upright in the waist. There was also a suggestion of using a sweep of 9 ft. instead of $6\frac{1}{2}$ ft. for the 'blister' and so making a fairer curve outside all.

As a matter of fact one can draw quite a reasonable midship section without any 'blister' by adding twice the thickness of timber and plank (10 in. by Laughton's estimate) on either side. Col. Prynne sent me a rough drawing showing this and added: 'It is true that it gives a sharpish curve between the decks, but that accords with pictures etc.' With this I agree; the curve is certainly no sharper than that shown in some of Baker's drawings in *Fragments of Ancient Shipwrightry* where there is no sign of a girdling. An addition of 1 in. to the moulded scantling of the timbers would improve matters and allow for the 'great feet'.

RECORDS

Contributed by G. R. G. Worcester

Origin of some names appearing on Admiralty Charts Nos. 2809, 2678, 2695, 3294, 1115 and the General Chart No. 3522 of the Yangtze Kiang

During the China War of 1840–42, and after, the British Government kept vessels continually surveying in Chinese waters.

The names of places appearing below refer to a number of topographical features of the Yangtze Kiang and were bestowed for the most part by the early British Naval Surveyors of the river. When the River Inspectorate of the Chinese Maritime Customs, staffed chiefly by British nationals, literally and figuratively took up the torch from these old surveyors and triangulated, sounded, marked and lit the channels, they naturally adopted the names already more than half a century old, so that these names have now been continually in use for well over a hundred years. When, some time in the forties, the newly formed Hydrographic Department of the Chinese Navy took over the charting of the river (with funds derived from the Chinese Maritime Customs) they decided to substitute, no doubt quite rightly, Chinese place names. It is therefore to be expected that these old names will soon fall into desuetude and be completely forgotten, particularly as the Yangtze is now well behind the 'Bamboo Curtain'. Nevertheless, those who are stirred by the romance of the opening of this great river to foreign shipping in 1861, and the many who knew the river in the early part of the twentieth century when these names were still common currency, will be interested to see them here preserved and to learn, perhaps for the first time in many cases, how and whence they were derived.

Actaeon Shoal. H.M.S. *Actaeon*. A barque-rigged surveying ship of 620 tons, launched 1831. Commissioned for service in China in November 1856 by Captain William Bate, R.N., with orders 'to make the best of your voyage to China'. She took 232 days to reach Hong Kong, and was one of the fleet of 32 vessels which took part in the attack on Canton. Broken up 1889.

Astraea Channel. H.M.S. *Astraea*, a 2nd class cruiser, the first vessel to pass through this channel.
Ayres Island. Mr W. E. Ayres. One of the first Yangtze pilots, 1854.
Barker Island. Captain Barker, R.N. Commanded H.M.S. *Retribution*, a 10-gun, paddle-wheel steamer, launched 1884. She took part in Lord Elgin's voyage up the Yangtze in 1858.
Bate Point. Captain W. Bate, R.N., of H.M.S. *Actaeon*, q.v.
Bedwell Reach. Assistant Paymaster Bedwell, R.N., of H.M.S. *Actaeon*.
Beecher Point. Another captain of H.M.S. *Actaeon*.
Bethune Point. Captain Bethune, R.N., H.M.S. *Conway*. Made the first examination of the entrance to the Yangtze, penetrating up-river as far as Fushan, in 1840.
Blakiston Reach. Captain Thomas Blakiston, R.A. An indefatigable explorer. Leader of a private venture to ascend the Upper Yangtze. The running survey he carried out was destined to be the only chart of the Middle and Upper Yangtze for many years and formed the basis of all subsequent maps until recent times.
Blonde Shoal. H.M.S. *Blonde*, 42 guns, took part in the operations against Nanking, 1842. The first of many ships in the expedition to ground on the shoal. This hazard, which has always caused embarrassment to every early expedition up the Yangtze, extends along the right bank of the river for seven miles and dries out for a distance of more than half a mile at low water.
Boone Reach. William John Boone. One of the first missionaries to China.
Bouncer Island. H.M.S. *Bouncer*, launched 1855, gunboat, took part in Lord Elgin's Mission to open the Yangtze to foreign trade, 1861.
Bullock Reach. Lieutenant C. J. Bullock, R.N. Former Captain of H.M.S. *Dove*.
Bythesea Channel. Captain Bythesea, V.C., R.N., H.M.S. *Dove*, sloop; accompanied Lord Elgin's Mission.
Camel's Hump. So named by Blakiston from the shape of the Nan Tsuin Hills.
Cement Channel. Three lighters loaded with cement sank in the fairway, 1912.
Centaur Shoal. H.M.S. *Centaur*, paddle-wheel frigate. Took part in Admiral Sir James Hope's expedition up the Yangtze, 1861.
Christmas Island. Where the gunboats *Lee* and *Dove*, in Lord Elgin's Mission, spent Christmas night, 1857. See also 'Rover'.
Clio Cut-off. H.M.S. *Clio*, sloop. Took part in operations against Nanking, 1842.
Cockchafer Island. H.M.S. *Cockchafer*, a gunboat chiefly famous for her part in the 'Cockchafer Affair', at Swatow, 1868.
Collinson Island. Captain Collinson, R.N., came into prominence as the senior of the two surveyors responsible for the pilotage of the fleet in the operations against Nanking, 1842.
Compton Reach. *Sir Herbert Compton*, a Chinese man-of-war. Acquired from England.
Confucius Channel. Named after one of the earliest river steamers.
Consular Bluff. Consular officials at Chinkiang went there for weekends.
Cooper Bank. S.S. *Cooper*, a vessel built in China as a river steamer. Carried the civilian members of Admiral Hope's mission up the Yangtze, 1861.
Cores de Veres Rock. S.S. *Cores de Veres*, the first steamer to hit this dangerous rock lying in the fairway.
Cornwallis Bluff. H.M.S. *Cornwallis*. Launched 1813. Flagship of Sir William Parker in operations against Nanking, 1842; the Treaty of Nanking was signed in her.
Court Reach. Mr Court, Master of H.M.S. *Furious*, accompanied Lord Elgin's Mission, 1857.
Creasy Reach. Lieutenant Creasy, R.N. Captain, H.M.S. *Bouncer*, q.v.
Demodocus Channel. S.S. *Demodocus*, a Blue Funnel ship, and the first vessel to use the channel.
Dove Island. H.M.S. *Dove*, gunboat. The first man-of-war to reach Hankow.
Elgin Reach. The Earl of Elgin and Kincardine.
Espiegle Bank. H.M.S. *Espiegle*, gunboat.
Fitzroy Island. S. Fitzroy, esquire, a member of Lord Elgin's staff.

Frog Point. Named after the *Lienshing*, the slowest of the River Inspectorate's launches, and always referred to as the 'Jumping frog' after Mark Twain's famous frog of that name.

Furious Rock. H.M.S. *Furious*, paddle-wheel frigate. Accompanied Lord Elgin's Mission, 1861. When leading the squadron the *Furious* struck this isolated rock and remained pinnacled for two days. She was refloated, undamaged, after lightening.

Gallows Channel. Named after the captain of British gunboat, H.M.S. *Lee*, who acquired the name of 'Gallows Jones' not through any sinister habits of administrating justice, but because of his reputed mournful attitude to life.

Gough Island. It is not certain how Gough Island got its name. It may have been called after the general of that name, but more probably after the captain of the *Union Star* who, when his ship was on speed trials, on 16 June 1862, ordered more and yet more steam until finally the boiler burst, blowing the funnel, mast and deck-houses overboard. The captain, Mr Palmer, the pilot, and three others were killed.

Governor General. S.S. *Governor General*. One of the first British merchant ships on the Yangtze.

Grant Point. Sir Hope Grant.

Gravener Island. Lieutenant Gravener, R.N, an officer of the *Retribution*, travelling in H.M.S. *Dove*.

Gutzlaff Island. Eminent German divine of that name.

Harvey Channel. Lieutenant Harvey of H.M.S. *Conway* who, on 10 September 1840, was shot while leading a party landed to obtain provisions. He and a marine were the first British sailors to lose their lives on the Yangtze.

Havoc Rocks. H.M.S. *Havoc*. Accompanied Sir James Hope's Expedition, 1861.

Huc Reach. So named by Blakiston in honour of the Jesuit explorer whose writings were of help to the expedition he was leading.

Hunter Island. Lieutenant Hunter, R.N., an officer of H.M.S. *Retribution*, travelling in H.M.S. *Dove*.

Jocelyn Island. Mr Jocelyn, a member of Lord Elgin's suite.

Jones Island. Lieutenant Jones, in command of H.M.S. *Lee*; see also Gallows Channel.

Kepple Point. Captain H. Kepple, R.N., in command of H.M.S. *Dido* in the operations against Nanking, 1842. Later, as Admiral Sir Henry Kepple, he ascended the Middle Yangtze in H.M.S. *Salamis*, the last part of the journey being in H.M.S. *Opossum*, 1869.

Kiangloong Rock. S.S. *Kiangloong*, a river steamer wrecked on this rock.

Lay Island. The name of a famous family which for several generations played a part in China, notably Horatio Nelson Lay, C.B., 1st Inspector General of the Chinese Imperial Customs Service, 1857–63.

Lee Rocks. H.M.S. *Lee*, a gunboat.

Lundy Bank. Mr O. A. Lundberg. The only member of the River Inspectorate to give his name to any portion of the river. Self-named.

McQueen's Rock. Captain McQueen, a river-steamer captain.

Mason Point. Lieutenant Mason. Captain of H.M.S. *Algerine*, surveying tender to H.M.S. *Conway*, 1840. Took part in the operations against Woosung, 1842.

May Queen Island. River steamer of that name.

Muirhead Hills. Dr Muirhead, one of the first medical missionaries to China. Lived in Shanghai for 53 years.

Oliphant Island. A member of Lord Elgin's suite.

Opossum Point. H.M.S. *Opossum*. See also Kepple Point.

Osborn Island. Captain Sherard Osborn, R.N. Served in H.M.S. *Clio* during the operations against Nanking and later distinguished himself as Captain of H.M.S. *Furious* on her famous voyage up the Yangtze with Lord Elgin. In 1857 he was entrusted with the difficult task of safely escorting fifteen gunboats to China. In 1862 was in command of the *Lay-Osborn* flotilla 'for the purpose of re-establishing Imperial authority on the Yangtze'.

Plover Point. H.M.S. *Plover*.

Point Morton. Lieutenant Morton, R.N., 1st Lieutenant of H.M.S. *Retribution*.

Poison Reach. So named by Blakiston, as it was here that he ate Tung Oil nuts in mistake for Brazil nuts.

Poole Island. Lieutenant Poole, R.N., H.M.S. *Havoc*.

Rover Island. See also Christmas Island. Rover Island named after the dog, an Irish Terrier, belonging to the captain of H.M.S. *Lee*, which after biting eight people, including his master, died and 'was buried at sea'. Ten weeks later one of those he had bitten died of hydrophobia in Hong Kong.

Salamis Bar. The highest point reached by H.M.S. *Salamis*, Kepple Point, q.v.

Squeeze Island. The 'Squeeze' so named because the large ships taking part in Lord Elgin's Mission just managed to squeeze through, 1857.

Sunday Island. So named by Blakiston after the day of the week.

Swinhoe Channel. Sir Robert Swinhoe. A consular official. He was a great scholar, a linguist and a very able naturalist and ornithologist. Accompanied Admiral Sir Henry Kepple's Mission.

Wade Island. Sir Thomas Wade, G.C.B. An army officer. Took part in the operations against Nanking, 1842. Became a consul and finally minister to China. Was one of the first co-inspectors of the Chinese Maritime Customs, 1854, and the first Professor of Chinese at the University of Cambridge.

Ward Reach. Commander Ward, R.N. The least advertised of all the China Surveyors and quite possibly the best, commenced his surveying activities in 1851. For three years after the Elgin Expedition he commanded H.M.S. *Actaeon* and in her surveyed the Gulf of Pechili, until then unknown, and also explored the Yangtze to a point 200 miles above Hankow.

Wild Boar Reach. On 25 November, H.M.S. *Dove*, one of the ships in Lord Elgin's Mission, gave chase to an animal swimming across the river. This proved to be a wild boar, which was eventually lassoed from a boat, and towed to the ship, where it was finished off with a rifle. The prize weighed 150 lb. and boar's head graced Lord Elgin's table that night.

Williamette Channel. An American river steamer of that name.

NOTES

COPYRIGHT AND PIRACY IN EIGHTEENTH-CENTURY CHART PUBLICATION

Plagiarism, it has been said, is commoner and less easy to detect in cartography than in any other branch of intellectual work except music. This is well attested by English chart production of the eighteenth century. Chart-sellers not only continued to pull impressions from old plates without correction and without stating the age and reliability of the survey (lest it 'hurt the sale of the work', as Cook said). They also freely spared themselves the expense of survey by copying other men's work; and an exasperated geographer could complain in 1747 that the purchaser of a 'new' map or chart acquired only a new title. Not until 1734 did an English statute (8 Geo. II, c. 13) offer any legal protection to the owner of copyright in an engraved map or chart. Until then he enjoyed only limited common law rights derived from registration of his work at Stationers' Hall or from a privilege conferred, in special cases, by royal patent. The Act of 1734 secured copyright protection for fourteen years to the author of an engraved work, every impression of which had to bear the 'day of first publishing' and the proprietor's name and address. A second Act (7 Geo. III, c. 38) extended the term of copyright to twenty-eight years. The law seems to have needed still more teeth, for in 1777 a further Act (17 Geo. III, c. 57) was passed 'for more effectually securing the Property of Prints to Inventors and Engravers'. This reinforced the provisions of the earlier statutes, allowing the proprietor to claim damages and double costs in

respect of unlicensed publication of 'any print or prints of any. . . map, chart or plan'. The three Acts remained in force until 1911.

In 1785 and 1789 the hydrographer John Hamilton Moore (1739–1807) was the defendant in two actions brought against him for alleged infringement of copyright in printed charts and heard in the Court of King's Bench. The reports of these cases printed by him and appended to editions of his works (Documents 2 and 3 below) throw an interesting light on the difficulty of determining infringement, on the character of the expert evidence called, on the judicial interpretation of the statute, and, not least, on conditions in the chart-trade and the motives of the plaintiffs in the two cases.

J. H. Moore's career is briefly described in his obituary notice, here reprinted (Document 1) from the *Gentleman's Magazine*. About 1780, or soon after, he established a chart-seller's shop and navigation school on Tower Hill, where he offered to board his pupils. At various dates he advertised himself in his published works as 'teacher of the mathematics, and late of the Royal Navy' (1772), 'master of the Academy at Brentford' (*c.* 1780), 'teacher of navigation, hydrographer and chartseller to the Duke of Clarence' (1791), 'chartseller to the Empress of Russia' (1793), 'sea-book, instrument and chart seller' (1804). The best-known of his publications is *The Practical Navigator and Seaman's New Daily Assistant* (1772; 9th edition improved, *The New Practical Navigator*, 1793; 16th edition 1804). Through this work, as will be seen, Moore became—perhaps deservedly—the victim of a subtle literary piracy, which was to result in a notable contribution to the literature of navigation. While still at Brentford he also published two compilations, *The Young Gentleman and Lady's Monitor* (nine editions by 1795) and *A New Collection of Voyages and Travels* (apparently one edition only, undated).

As a hydrographer Moore was prolific: his chart-catalogue of 1791 lists 36 titles, and that of 1794, 55 titles. We may suppose that he was considered an inconvenient competitor by other and more substantial firms. While the very high damages claimed from him by Sayer and Bennett in 1785 and David Steel in 1789 (£10,000 and £3000 respectively) may point to the value of the market in charts, they also suggest that the plaintiffs' motive in these lawsuits was to ruin a rival and drive him out of business. This does not seem to have escaped notice by Lord Mansfield, judge in the first action, whose comments contain an interesting interpretation of the copyright law. It is the more curious to note that one of the plaintiff firms enjoyed trade relations with Moore which almost amounted to partnership; for the catalogues of Robert Sayer and, after his death in 1794, of Laurie and Whittle, his successors in business, show that he owned one-fourth of the copyright in Moore's *Seaman's New Daily Assistant*, which was issued separately from the *New Practical Navigator*.

Sayer and Bennett *v.* Moore was heard on 1 March 1785. The action was provoked by the defendant's publication, early in 1784, of his 'New and Correct Chart of North America. . . drawn from the latest marine journals and surveys' and extending from Belleisle Strait to Florida. The plaintiffs' charts, infringement of copyright in which was alleged, are not named, but seem to be four of those published by them in *The Western Neptune, or Pilot for America* (1778). Some had previously appeared in *The North American Atlas* of 1775, and all were apparently old plates engraved *c.* 1769–70 by or for Thomas Jefferys (who is named as the compiler of two) and acquired by Sayer and Bennett after Jefferys' death in 1771. These charts, it must be noted, were compiled from good materials, including the surveys of Cook, Holland and Lane; and it was principally their construction that Moore's high-powered witnesses condemned. While Moore's were Mercator charts, those of Sayer were drawn on a common cylindrical projection, in other words (as two witnesses testified) 'neither upon the plain, nor Mercator projection, and, consequently, erroneous' and useless to the navigator. Comparison of the rival charts, besides indicating the impertinence of the plaintiffs' case, suggests that Moore also disposed of newer sources; his claim to have used 'marine journals' is confirmed by the dedication of the 1804 edition of his *Practical Navigator* to Sir Andrew Hammond, Comptroller of the Navy, 'in acknowledgement of the favour of being permitted to have Access to the Journals of the Royal Navy'.

Two of the defence witnesses in this action were associated with Captain Cook: Admiral John Campbell, Governor of Newfoundland 1782–86, had introduced Cook to the Council of the

Royal Society in 1768, and William Wales had sailed round the world with Cook in 1772–75. John Stephenson, Master R.N., was an experienced hydrographer, most of whose work (rather unexpectedly) had been published by Sayer and Bennett.

David Steel's case against Moore, in which Stephenson was again summoned for the defence, was even weaker than Sayer's; and it is not surprising that Steel's counsel made an unsuccessful attempt to suppress evidence so damaging to his client. Scrutiny of the respective Thames Estuary charts confirms the inference from Stephenson's testimony that, if anyone was guilty of uncritical copying and perhaps piracy, it was John Chandler, the author of the chart published by Steel in 1782. Moore emerges as a critical and conscientious hydrographer—although not very sensitive to his duty to deposit copies of his publications in the British Museum, where few original editions of his charts are to be found.

Steel was, however, to have his revenge, when in 1802 he paid 200 guineas for the English rights in Nathaniel Bowditch's *New American Practical Navigator*. Bowditch had in 1799 published at Newburyport, Mass., an apparently unauthorized reprint of the 13th edition of Moore's *New Practical Navigator*, with corrections and additions. The second American edition of 1800 was the first to bear Bowditch's name; and it was in connexion with the third, of 1802, for which Bowditch made a searching revision, that the business arrangement with Steel was made, and the mathematician Thomas Kirby engaged as 'English Editor'. It must have been with particular satisfaction that, in his Address to the Public, Steel drew attention to the 'many thousand errors' found in Moore's work, including one (in the declination tables) 'which has been fatal to many vessels'. That Moore was hit by the rival work appears from a 'caution' inserted by him in the 16th edition of his own book, in 1804: '. . . the RAPID SALE of my former Publications has induced, by the prospect of lucre, several persons in Ireland, Scotland, &c. to publish surreptitious editions thereof. The injustice of infringing on my Copy-right I could pardon them, did I not perceive my reputation in danger of being injured by their prefixing my name to their spurious Editions, the off-spring of ignorance, error and inattention. . . .' Yet (as Mr George Naish informs me) the *New Practical Navigator*, edited after Moore's death by J. F. Dessiou, had at least four later editions—the 20th, and perhaps last, being issued in 1828.

The fortunes of Bowditch's celebrated handbook are outside the scope of this note. They are described in a work in preparation by Captain John F. Campbell, of Cristobal, Panama Canal Zone. My correspondence with Captain Campbell, and searches arising therefrom, suggested the compilation of the present note. I am also indebted to my colleague Mr S. F. Morris for help in connexion with it.

Document 1

Obituary notice of John Hamilton Moore

In *The Gentleman's Magazine*, Vol. LXXVII (1807), p. 1174 (under date 30 December).

At Chingford Lodge, Epping Forest, in his 69th year, Mr John Hamilton Moore, late teacher of Navigation on Tower-Hill, author of Moore's Navigation, Seaman's Daily Assistant, the Monitor, &c. He was born at a village near Edinburgh, and there brought up by an aunt, till about 8 years of age, when he was taken by his father, who was a bleacher, to near Londonderry in Ireland; whence he was sent to Monaghan, under the celebrated Mr Ballandine to study the Mathematicks. After he had finished his education, he entered as a cadet in the Plymouth Division of Marines, and served on-board Commodore Elliot's ship, the Brilliant, at the time he took Mons. Thurot; after which he was sent to Plymouth, and got his discharge. He then turned his mind to study, and became, after various reverses of fortune, one of the teachers at the late Mr Hebden's, at Hounslow, where he compiled his Epitome of Navigation, which will be a lasting memorial of his knowledge in that science. After this, he came and settled in London, where, by his perseverance and industry, he caused the best Charts to be published that had ever been done by any individual in this or any other nation. Notwithstanding this and all his other labours, and after giving the late Lord Howe his proper knowledge when he was first Lord of the

Admiralty, with regard to having the coasts and harbours surveyed by the Officers of the Navy, and to be delivered to each Captain, in the same manner as other stores, which has lately been adopted; after doing so much, when applied to lately, Government did not know him, excepting Lord Spencer, late First Lord of the Admiralty, to whom he has lately dedicated a new Edition of his Navigation.

Document 2

[Sayer & Bennett *v.* J. H. Moore, 1 March 1785]

Extracts from a Letter written to James Bogle French, Esq., Foreman of the Special Jury who tried the Cause in the King's Bench at Guildhall, between Messrs Sayer and Bennett, Plaintiffs, and Mr John Hamilton Moore, Defendant, by Mr John Stevenson, one of Mr Moore's Witnesses.

The Action was brought for copying of certain Charts, the property of the Plaintiffs: and the damages were laid at Ten Thousand Pounds; Mr Stevenson's Letter was written in consequence of a paragraph in the *Public Ledger* of March 12, 1785, and a copy of it was published in that paper on the 28th of the same month.

'Upon my being asked by Counsellor Cooper whether I had seen Mr Sayer's Charts, and those of Mr Moore's, which were said to be copied from them? I answered in the affirmative, adding that I had not only seen, but carefully examined them. Being then asked, whether I thought Mr Moore's Charts were exact copies of Mr Sayer's? I answered, "No, I think they are essentially different:" Being desired to give the Court an account of that difference, I answer'd in substance as follows: That the Charts of Newfoundland, and the adjacent Coasts, four in number (three particular and one general) were constructed upon very different principles: Mr Moore's were constructed upon the true principles of Mercator-sailing; but Mr Sayer's were neither plain nor Mercator's Charts; they were contrary to every received principle of geography and navigation, and, consequently erroneous. That although the taking of the latitudes and longitudes of the principal places from the same authorities, had occasioned their positive situation to be nearly alike in both sets: yet Mr Sayer's charts, being constructed upon erroneous principles, the relative situation of places partook of that error, and consequently the course and distance from place to place, were erroneous.

'That the Charts of the Gulf of Florida and the West Indies, were on both sides on the Mercator's projection, but that Mr Moore's differed materially from Mr Sayer's in the situation of the principal places; that I found no less than twenty-four of those places to differ either from ten to eighteen miles in latitude, or from ten to thirty-three miles in longitude.

'Admiral Campbell, F.R.S. and Governor of Newfoundland, declared to the Court, that Mr Moore's Charts, so far from being considered in the light of exact copies, were really a very meritorious and happy improvement on charts, (Mr Sayer's) which he reprobated as erroneous and dangerous, to such a degree, that when he first examined them, on his station at Newfoundland, he was grieved for the honour of his country, that such a publication should originate in England, and often wished to have had the power of suppressing it intirely by burning all the charts, and destroying the plates.

'Mr Wales, F.R.S. and Mathematical Master of Christ's Hospital (who circumnavigated as astronomer with Captain Cook) confirmed what had been said by Admiral Campbell, and Mr Stevenson concerning Mr Sayer's Charts of Newfoundland and the adjacent Coasts; namely that they were neither upon the plain, nor Mercator projection, and, consequently, erroneous. With respect to the West Indies, he found that Mr Moore's Charts differed materially from Mr Sayer's in the latitudes and longitudes of some principal places.

'The late Lord Mansfield, on summing up the evidence, observed, that the act of the 17th of his present Majesty was made to guard the property of ingenious men against copying, with only some colourable alterations; but never was intended to prevent the making of useful and important improvements. He stated what was said of the four Charts of Newfoundland, and the adjacent Coasts; and with respect to the West Indies, he related what had been said concerning

the latitudes and longitudes of twenty-four of the principal places in that quarter. His Lordship also observed, that the situation of places was certainly an important object in the constructing of Charts; and he enforced his observations by saying, that whether the Isle of Wight was exhibited in Charts, where it really stands, or placed in the middle of the British Channel was certainly a matter of great importance to every interested navigator.'

The Jury gave a Verdict for Mr Moore.

Document 3

[David Steel *v.* J. H. Moore, 5 March 1789]

Extract from *The Sunday Gazette* of 8 March 1789.

'On Wednesday last a cause was tried, before Lord Kenyon and a Special Jury of the London Merchants, between Mr David Steel, Bookseller, of Union-row, Tower-hill, Plaintiff, and Mr John Hamilton Moore, Teacher of Navigation, on Tower-hill, Defendant.—The action was to recover £3000 damages, alledged by the Plaintiff to have been sustained by him on account of the Defendant having published "A Chart of the East Coast of England, including the Navigation from the South Foreland to Flamborough Head", from the "latest Observations and Surveys", which Mr Steel contended to have been pirated from two charts of his, published by him in 1782, drawn by John Chandler; when it appeared by the evidence of Mr John Stevenson, and Mr Porteous, pilot to the squadron in the North Sea, during the last war, that there are a great many very material errors in Mr Steel's Charts, which are corrected in Mr Moore's.—Mr Stevenson pointed out one hundred and six places, in which Mr Moore's differed materially from Mr Steel's, besides many others of less note.—The Jury were prepared to give a verdict in favour of Mr Moore, but were prevented by Mr Steel's Counsel submitting to a nonsuit, which subjects Mr Steel to pay Mr Moore his costs of suit.—Lord Kenyon declared he heartily concurred with the Jury, and expressed his indignation that such erroneous charts as Mr Steel's should be published. Mr Moore was prepared, had it been necessary, with three other masters of the Royal yachts, besides many experienced navigators, to prove the correctness of his Chart, and the erroneousness of Mr. Steel's.'

Mr Stevenson observed, that the Isle of Grain in Mr Steel's Chart was placed almost its whole breadth too far back from the entrance of the Thames: and that in his particular Draft of the Thames, which was on a larger scale, and therefore admitted of greater accuracy, there did not appear to be any island at all. That the latter appeared to be an exact copy of Mr Diston's Draft of the Thames, excepting that the lower part of the river was somewhat more lengthened, which might have been owing to the stretching of the paper in tracing, from the upper part downwards.

When Mr Stevenson was prevented by the Plaintiff's Counsel from mentioning all the 106 places in which Mr Moore's Charts differed materially from Mr Steel's, he proposed to enumerate 13 only, which differed either from 3 to $7\frac{1}{2}$ points in bearing, or from 4 to 9 miles in distance, but was again prevented; he then proposed to speak of one place only, but even in that he was also prevented! the place meant by Mr Stevenson was the Mouse and West Barrow Sands, which were afterwards adverted to by Mr Porteous, Mr Chandler (who drew the Plaintiff's Charts) instead of making the Buoy on the Shivering-Sand, that on the east end of the Oaze, and the Buoy of the west end of the Mouse, lie nearly in a line with each other in his Chart, has placed the Mouse and the West Barrow Sands above 4 miles farther to the westward than they ought to have been, he has also thought fit to make the Shoe-Beacon follow the Mouse to the westward. The consequences are, instead of the buoy on the Mouse lying 2 miles N.N.W. from the east buoy of the Oaze, he makes it to bear W.$\frac{1}{2}$N. distance 5 miles, and, instead of laying the Mouse buoy 7 miles E.N.E. from the West buoy of the Oaze, and 5 miles E. by S.$\frac{1}{2}$S. from the Black Tail Beacon, he makes it to lie $2\frac{1}{4}$ miles N.E.$\frac{3}{4}$E. from the former, and 2 miles E. by S.$\frac{3}{4}$S. from the latter. Instead of the Shoe-Beacon bearing N. by E. from ships when in the Fairway, between the Nob and the Oaze buoys, Mr Chandler has placed the Beacon so far to the westward, as to make it bear N.W. and instead of the buoy on the Mouse being seen from ships in the aforesaid situation, bearing N.W. by

N. Mr Chandler, by placing the west end of the West Barrow in that line of bearing, has directed them to look no less than $4\frac{1}{2}$ points more to the westward for the buoy on the Mouse! Mr Chandler dedicates his Chart, by permission to the Elder Brethren of the Trinity House; but the misplacing of the Oaze-sand is so glaring, that those Elder Brethren, who are so well acquainted with the Nob Channel, must have discovered it at first view; and, if they granted permission without examination, they may be deemed, if possible, more highly culpable. The most rational supposition is, that Mr Chandler has laboured under something, which, to say the least, appears very like a mistake!

Mr Stevenson desired Mr Champion, one of the Jury, to compare the northernmost part of the Plaintiff's first Chart, with the southernmost part of his second Chart, and he would see a very considerable difference in the form and situation of those sands which are exhibited in both; which difference, Mr Stevenson said, amounted to a clear proof, that both Charts had been copied, and copied from different authorities. In the small space which is comprehended in both Charts, the relative positions of no less than 13 places in the second Chart differ from those of the same places in the first Chart, from $\frac{1}{2}$ to $4\frac{1}{2}$ points of the compass.

R. A. SKELTON

NOTES ON 'MANNING THE ROYAL NAVY'

In his interesting 'footnote' (*M.M.* Feb. 1960, p. 65) to R. Taylor's articles with the above title (*M.M.* Nov. 1958 and Feb. 1959) Mr Calkin refers to Lindsay's suggestion that the best way to secure a capable reserve was to double the strength of the Royal Marines; pointing out the high esteem in which the Corps was held, and maintaining that marines were capable of doing everything on board ship (except to go aloft) as well or better than the sailors. Whether consciously or unconsciously, Lindsay, writing in 1858–59, was but repeating a proposal first mooted as far back as 1664, when the Duke of York's Maritime Regiment was raised.

Then, as later, scarcity of seamen was the problem, and there appears to exist sufficient evidence to show that the underlying motive in raising the regiment was, not only to reinforce the seaman element, but to induce the soldiers ultimately to become sailors on a permanent basis. A minute in the Admiralty Journal for 20 October 1677 (*Cal. Pepysian MSS.*, Vol. IV, edited Tanner, J. R., p. 505, for the Navy Records Soc. 1923) reads:

'Notice being taken of the difficulty of getting seamen for our ships while so great a merchant trade is going: ORDERED, that it should be referred to the Officers of the Navy' [i.e. the Navy Board] 'to consider of giving some help thereto by mixing a convenient number of land soldiers with each hundred seamen.' That this idea persisted with regard to the marine regiments, at least up to the beginning of Queen Anne's reign, is clear. Josiah Burchett (Secretary of the Admiralty 1694–1742) in his *Complete History of the Most Remarkable Transactions at Sea* (published 1720) on p. 615 writes:

'Six marine regiments were established by Queen Anne, but were put on a different foot than those that were thought necessary at the beginning, but discontinued at the close, of the last war' [i.e. William III's war]. 'For, as the soldiers were formerly discharged from the regiments and entered in the ships' books as foremast men when they had qualified themselves to serve as such, and money allowed the officers, to procure others in their place: so now, when any of the marine soldiers died or were otherwise missing, the companies were only made full by levy money to the officers, *without any regard to their being a nursery for seamen; which was one of the principal motives for the first raising of such a body of men*' (my italics).

Nor is this quite the end; a faint echo still persists. To this day, the *Queen's Regulations and Admiralty Instructions* contain a clause governing the case of marines who may desire to turn over to the seaman branch. There is no corresponding regulation enabling a seaman to become a marine.

R. D. MERRIMAN

NELSON'S FIRST LIEUTENANT AT TRAFALGAR

Describing that most interesting character, John Quilliam, First Lieutenant of H.M.S. *Victory* in 1805, I wrote in a recent book that 'he was a Manxman (according to Marshall) or an Irishman (according to Beatson)'. This has brought me a letter from a distinguished resident of the Isle of Man, Captain Roland C. Watkin, R.N., in which he proves beyond all doubt that Marshall was right and Beatson wrong. He very kindly authorizes me to quote the relevant parts of his letter here. It contains much interesting information about this 'lower deck' officer, which, though not all of it established history, yet has the cachet of long-established tradition.

'There is, of course, no doubt about this [that Quilliam was a Manxman]. He was born on his parents' farm at Ballakely in the parish of Kirk Marown, on the 29th September, 1771. He is said to have been an apprentice to a local stone mason who worked as a labourer on the Red Pier, Douglas, which was begun in 1793. He is reported to have run away to sea and to have been pressed into the Navy from a vessel in Castletown harbour.

'The local tradition is that he first came to the notice of Nelson at the battle of Copenhagen, when he was serving as a Lieutenant in the *Amazon*. The story is that Nelson, when on board the badly damaged *Amazon*, addressed Quilliam, one of the few surviving Lieutenants if not the only one, and asked him how he was getting on. To this Quilliam replied in a typical non-committal Manx phrase—"Middlin". His reply is said to have amused the Admiral, and perhaps he remembered the incident when he made him First Lieutenant in the *Victory*.

'Quilliam's success in the Royal Navy undoubtedly established his social position in the Island. In December, 1817, he married Margaret Christian Stevenson, the second daughter of Richard Stevenson of Balladoole. The Stevensons had for long been, and still in fact are, one of the principal families of the Island, and still living at Balladoole. Quilliam would never have made such a marriage in the ordinary way, and it is a clear indication that his rise in the social world was due to his success in the Royal Navy.

'He became a member of the House of Keys and is buried in Arbory Church Yard. A Trafalgar Day service is held annually at his grave; and it is very well attended, not only by the Royal Naval Association and the British Legion, but by quite a number of private individuals. The Manx people take great pride in him.'

MICHAEL LEWIS

THE *MINION* AND THE *BARK OF BULLEN*

In my recent *List of English Men-of-War, 1509–1649*, I entered one *Minion* (no. 54) as 'given away 1549 *c.*' and another (no. 144) as 'bought in 1560'. Both these statements were based on Oppenheim's *Administration of the Royal Navy*. He writes on p. 101 that 'the *Minion* had been given to Sir Thomas Seymour', before 1548. My '1549 *c.*' should clearly have been '1547 *c.*'; but that, as will be seen, was not the only mistake. As to the ship of 1560 Oppenheim writes on p. 123 that she and the *Primrose* 'had for some years been employed among the hired merchantmen; from 1560 they appear on the navy lists, which points to their purchase'.

Now it has been pointed out to me by Mr Tom Glasgow, jr., that there was a *Minion* in the fleet operating against the Scots in 1557 and that she was actually Sir John Clere's flagship. Two possible explanations suggest themselves; the ship given to Sir Thomas Seymour may have been forfeited to the Crown at the time of his execution in 1549 or she may have simply been hired for the year's campaign. In view of Oppenheim's second statement this seems the more likely.

Whatever the status of the ship may have been in 1557 it seems almost certain that the *Minion* condemned in 1570 after the return of Hawkins from the Spanish Main was the ship rebuilt in 1536. The tonnage, about 600, given by me for *Minion* no. 144 was a rather unintelligent guess based on her number of ship-keepers as compared with other ships. The average tonnage of the other ships also having ten ship-keepers is about 300.

The case of the two ships called *Bark of Bullen* (nos. 124 and 141) is very similar, for in the list of 1557 a ship of that name was serving 'in the Narrow Seas'. No. 124 was noted in the list of 1552 as being in Ireland, while Oppenheim describes her (p. 109) as 'delivered in 1553 to

Jeffrey Coke on condition of his carrying the Lord Deputy and the royal despatches to and from Ireland when necessary'. I think there is little doubt that nos. 124 and 141 should appear as a single ship. She may have been merely 'lent to the Irish packet service' and recalled for naval use in 1557, perhaps still in Irish waters, since the term 'Narrow Seas' would presumably cover the waters between Ireland and England.

R. C. ANDERSON

BOAT BAILERS IN ANCIENT EGYPT

Dr Rudolf Anthes, Professor of Egyptology at the University of Pennsylvania (U.S.A.), has written me the following interesting comments concerning certain portions of my 'Notes on Boat Bailers' (*M.M.* Vol. XLV (1959), pp. 255–60). Dr Anthes has given me permission to publish these comments, and has checked the manuscript for accuracy. He writes as follows:

'Some years ago I happened to make a study of the word *pnḳ* which is shown in fig. 7 of "Notes on Boat Bailers" (*ibid.* p. 259). A fourth determinative (from Pyr. 335) may be added to the ones shown. It represents a tall jar (with vertical, slightly concave sides, being a well-known type of stone jar) and a shallow bowl into which water is poured from a smaller oval jar. Actually, none of the determinatives is much reminiscent of bailing, although the conclusion that the Egyptians might have used shallow bowls for bailing stands well in its own right. The evidence of Egyptian diction from all periods including Coptic (the latest form of Egyptian), indicates that the object of *pnḳ* is the liquid, and not the container. In ancient Egyptian it may be used with the word for "urine" in the meaning of "to urinate", and in Coptic (where it is more often occurring than in earlier times) it is also used in the meaning of "translocate" non-liquid objects. Actually the word *pnḳ* does not occur in ancient Egypt in the context of bailing: it does occur for "drawing water out of a vessel". In Coptic, it does occur for "bailing". In view of the fact that the passage in the Pyramid Texts is the only evidence of the employment of *pnḳ* with the object, the boat, I prefer to think that it has some other meaning, perhaps a translocation of the boat (to put it into the water for the first time?) which is accompanied by the ceremony of libation which appears to be illustrated by the determinatives. It is not out of the question that it indicates a ceremony similar to baptizing a boat. The group of hieroglyphs in the middle of fig. 7 (*ibid.*) must therefore be understood as pouring water either into or in front of or beside a boat.

'As to the "bailer" included in an Egyptian inventory, Köster (*ibid.* p. 260) certainly refers to the word *pnḳ* which is included in the *Wörterbuch der ägyptischen Sprache*, Vol. I, p. 511, as an item "*pnḳ* der Schoepfeimer". This translation is not correct, however. The only evidence given for this word is its occurrence in a list of tomb offerings in a relief dated about 2600 B.C., now in Cairo (Cat. Gen. no. 1385 in L. Borchardt, *Denkmäeler des alten Reiches*, Berlin, 1937). Its determinative makes it clear that it is the same tall stone jar which occurs in Pyr. 335 mentioned above, perhaps with the lid added. This would certainly be one of the most inadequate forms for a bailer. Further, it may well be questioned whether there exists any interrelation between this noun and the verb. When all is said and done, I do not think that we should use the determinative in the Pyramid Texts as an illustration of the act of bailing. Since I have never published my examination of the word *pnḳ*, and since the translation of Sethe as "eine Boot ausschöepfen" ("to bail a boat out") has been accepted by all thus far, I hope that this correction may be of interest.'

RICHARD LEBARON BOWEN, JR.

A FORGOTTEN NAVAL BATTLE

War In The Eastern Seas, 1793–1815, by C. N. Parkinson (London, 1953), will long be taken as the standard work on the naval campaigns between Great Britain and its enemies east of the Cape of Good Hope during the Revolutionary and Napoleonic Wars. Naval historians presumably will differ over points of strategy, and will argue over the merits of invading Mauritius or Java; but on surveying the closely printed pages it is difficult to imagine that historians of any calibre will criticize it for lack of detail, or for any omission. 'Here it is', they will say, 'in full.'

So had I imagined it, and I was fascinated to discover subsequently, when reading through the

Prince of Wales Island Gazette, Malaya's first newspaper, published in Penang, the record of a forgotten naval action fought in the eastern seas in 1806. It is not in Parkinson, there is no account of it in naval history that I can unearth, and I doubt if it is listed anywhere in the Admiralty records. It is a minor affair, but I feel it may be of interest.

The account, from the 23 August 1806 issue of the *P.O.W.I. Gazette*, narrates how on 26 July, H.M.S. *Greyhound* (32: Captain Elphinstone), one of a detached unit of the fleet of Admiral Sir Thomas Troubridge, based on Penang, which was cruising in the Java Sea, sighted from the mast head in the late afternoon four strange sail. With H.M.S. *Harrier* (Captain Troubridge), it managed to watch them all night, lazily cruising to windward under a full moon, with the Celebes coast distant 3–7 miles.

Let the log of *Greyhound* take over. 'At daylight perceived the ships to leeward to be as follows: a frigate in the van, a ship resembling one of our armed ships, a large two decked ship like an English Indiaman, and a corvette; at half past 5 a.m. bore up under French flag as if to speak the frigate, the *Harrier* close astern of us; the ships to leeward showed Dutch colours and closed in a line of battle ahead. At 6, being within hail of the frigate, hauled down the French colours and commenced firing, which was returned with great spirit by the enemy.'

Note now the Nelsonian touch, the abandonment of the side-by-side hammer and tongs that had characterized engagements for centuries. '*Harrier* bore up and passing between the enemy's van and second ship, raked them both to great effect; [we] wore round the frigate's bow, raking her while passing and threw our sails back to regain *Harrier*, now engaged to leeward; our fire evidently superior to the enemies.' A fine piece of teamwork, which had subjected the leading Dutch frigate to fire from both sides.

'At half past 6 the frigate's fire ceased, hailed her to know if she had struck; sent the jolly boat on board to take possession of her, and brought our guns to bear on the ships astern, the Indiaman and armed ship immediately struck, the sloop of war making off to leeward.

'*Harrier* wore and made sail in chase of her, but having suffered much in her rigging, could not show so much canvas as the enemy, who apparently had suffered little in the action. Made *Harrier* signal of her recall, and her boat took possession of the Indiaman, as did ours of the armed ship.

'The prizes proved to be the Dutch Republican frigate *Pallas* (36 guns, 230 men), the *Vitoria*, formerly *Lucy Maria* (Captain Walter Dawes: 18 guns and 135 men), and the *Batavia* (10 guns and 84 men); the vessel which escaped was the Dutch Republican corvette *William* (20 guns, and 110 men). One seaman killed, Mr Wood, boatswain, Mr Marjoribanks, master's mate; Mr Bradford, clerk, and five seamen wounded but not badly. At noon the corvette under all sail standing for Macassar.'

The conquerors and their prizes arrived at Penang on 19 August, and two days later the Admiral, Sir Thomas Troubridge, made the following promotions. Into the captured Dutch frigate *Pallas*, which became H.M.S. *Macassar*, he placed as post captain his son, Captain Troubridge, of the *Harrier*. He took with him three of his lieutenants, the pursar, surgeon, boatswain, gunner and carpenter. Into the *Harrier* he posted Lieutenant Wilbraham of the *Blenheim*, his flagship, with the rank of commander.

Presumably captains and commander-in-chief then sat down to write their reports of the encounter. Both *Harrier* and *Greyhound* must have done well in prize-money. I doubt if we will ever read the reports, nor know of the possible wealth that came to Elphinstone and Troubridge. The despatches left Penang, it would seem, on the old *Blenheim*, when Troubridge senior sailed to take up his new command at the Cape, in December 1806. Utterly unfit, it foundered, with all hands, in a heavy gale off Madagascar on 1 February 1807. The *Harrier*, escorting her, nearly suffered the same fate, while the son searched in vain for his father. The only account of this skirmish, so far as I can ascertain, was printed in the *Prince of Wales Island Gazette*, and has never, until now, been noticed. Followed as it was by Admiral Pellew's attack on Batavia in November 1806, and his scuttling of the Dutch fleet there, it has been quite forgotten. I attach it as a footnote to history.

K. G. TREGONNING

THE LOSS OF THE *SÃO FRANCISCO*

(See *M.M.* 1960, p. 35)

Professor Boxer's account of the loss of the Portuguese galleon *São Francisco* in 1650 seems to need a little clarification. He writes that she left Lisbon on 21 April 1650 (presumably New Style) and was forced ashore by three ships of the English fleet under Blake and Popham. Now Popham only arrived off Lisbon on 26 May (Old Style) and until then Blake had no authority to attack Portuguese ships. Surely the *São Francisco* did not take more than 6 weeks to get clear of home waters.

R. C. ANDERSON

POLACRES AGAIN

In the February 1960 *M.M.* Mr Edgar K. Thompson states that Mediterranean polacres had no footropes except on their lower yards, and that in furling and reefing the men stood on the yard below. He does not explain how the process was possible nor what authority he has for his statement, but as his language is almost word for word that of Falconer's dictionary it is probable that he merely repeats Falconer.

With the exception of Admiral Paris I do not know a single non-English or non-American writer who makes a similar statement, even by those who describe at most length the polacre rig. Both in *Souvenirs de Marine* and *L'Œuvre de François Roux*, Admiral Paris, in commenting upon paintings of polacres by François Roux, speaks of the men putting their feet on the yard below to reef and furl. But inasmuch as the very pictures he explains are of vessels having footropes on their upper yards, and as Admiral Paris himself said the pictures of François Roux could be relied upon for complete exactness even in the smallest details, it is probable that Admiral Paris had read Falconer. And how many other mis-statements he was responsible for!

The pictures of a great many artists of Mediterranean nations, whose nautical competency is evident at a glance, show footropes on the upper yards of polacres. If Falconer was right they were wrong—it is a question of credibility. Let us examine Falconer's record for competency.

He says that a xebec:

Was a small vessel, and a few paragraphs further on says they sometimes had 24 guns and 450 men!

That the sails were similar to those of a polacre—in other words that they were similar to square sails. Yet it is evident that he is speaking of lateen-rigged xebecs....

That their hulls were 'extremely different' from that of a polacre and from those of almost every other vessel. Yet a xebec could be rigged (and often was after about 1750) as a polacre, and the hulls of many Mediterranean vessels resembled that of a xebec. The hull of a felucca was little else than that of a small xebec.

That they were of great breadth. Plans of eighteenth-century xebecs show they were not of unusual breadth even if the breadth be measured at the top of their (sometimes) greatly flaring bulwarks. Measured where they would be for tonnage they were rather narrow.

That their decks had excessive round up. This was true in some cases (and it was often true of Mediterranean vessels in general) but not in all, and if the plans of eighteenth-century xebecs I have seen are typical, its absence was as common as its presence. Several plans of xebecs without excessive round up are in *Souvenirs de Marine*.

That in moderate weather they carried large lateen sails by the wind and square sails running, and interchanged them according to the point of sailing. One can find in almost endless number pictures of xebecs running under lateen sails; I have never seen one of a xebec under Falconer's 'square sails of extraordinary width'. The practice of carrying lateen sails wing-and-wing was so common that there was a Provençal expression to denote that position of their sails.

That their storm sails were small lateen sails. Mediterranean testimony is unanimous that they were square sails, called in French *voiles de tréou*.

It is remarkable that a man, nearly every one of whose statements about xebecs are wrong, should pass as an authority on polacres.

On the other hand, it would be difficult to contradict the statement of Louis Brès that the paintings of François Roux were not only works of art, they were absolutely exact documents. The same could be said of those of his father.

With one exception every Anglo-American writer I know who devotes one paragraph to polacres does not fail to repeat Falconer upon footropes. Inasmuch as it would have taken rather long stilts to have stood on the topsail yard and furled a topgallant sail in a polacre with fidded topgallant masts it is evident that none of these were at all familiar with their subject, as such vessels were a common type. And strangely enough among them is Admiral Smyth of the *Wordbook* who must have *seen* many such polacres.

In a note in the February 1957 *M.M.* I explained how in a vessel of any size the mere presence of the lower stay made the Falconer method impossible with respect to topsails. When the mast was in one spar there was nothing to prevent clewing down a topgallant yard until it touched the topsail yard, but given the manner that these topgallant yards were rigged the Falconer method is equally impossible with respect to topgallant sails. As is evident in paintings and engravings, if the topgallant yards had any lifts, they lead not to the topgallant but to the topmast head, and consequently were slack if the topgallant sail was furled while the topsail was mast-headed. Hence there was nothing to keep the yard from revolving about an axis passing through the slings of the yard and the point where the braces if produced would intersect. If a man attempting to furl the topgallant sail with his feet on the topsail yard put any unsymmetrical weight upon the topgallant yard, that yardarm (if the braces lead aft and downward) would go down forward and the other up and aft. Not that such topgallant yards had footropes, but that they were furled by men on the topsail yard footropes, as all sails set flying were.

But provided the sail was large enough so that furling it would tax the strength of a man, no matter how the yard was rigged nor how easy it was to get it at the most convenient distance from the yard below, the Falconer method was still insane, and it is noteworthy that so far as I know no one ever attempted to use it in the very suitable (?) case of upper topsails and topgallant sails. A footrope was not merely a device for supporting men, it was a powerful tool for handling a sail. It had an attribute that the Falconer substitute lacked completely—it could swing with the yard as axis and the stirrups as radii. Thanks to this the men's legs could approach the horizontal, they could lay across the yard and reach well below and before it to get at the canvas. When they had hold of it, the moment of the weight of their legs about the yard and the impetus and unison with which they brought down their feet aided them to rouse up the canvas on the yard. They then could confine it between the yard and their bodies while they dove for another handful. Their bodies were levers rotating about the yard and they used every part of them in handling the sail. The Falconer man had to keep (if he were lucky!) his feet on the yard below, another yard was against his stomach. There was a song used in furling a sail that contained the line 'Paddy can't dive for his boots!' which describes the Falconer man's position—he could not dive for the sail. If he did get hold of it he could only rouse it up with his arms and torso. But if, in spite of these handicaps they did rouse it up on the yard what would they have done with the canvas?—any bulk between their bodies and the yard would have rendered their position even more precarious.

But if a footrope had a property that permitted men to work effectively on a yard, it had another —that permitted him to survive there: it was a part of the yard and moved with it, and it afforded a foot-hold good in comparison with the slippery rotundities of a yard. When the men had hold of the sail its jerks merely tended to swing the footrope—they did not pull the men's feet off the yard. The Dutch writer Le Comte judiciously recommended that a man on a yard should lean against it, he should never lean back nor 'press the footrope underneath the yard'—he should never do precisely the only thing a Falconer man could do. The Falconer method required that the two yards be maintained exactly parallel and this never could have been done. The old-fashioned running truss of the lower yards was not a rigid affair; the type of truss used on the topsail yards of many polacres was so unrigid it is surprising it was ever used. Still more, with wooden spars and hemp rigging the masts deflected so much when the vessel scended that it was impossible to

haul both braces taut lest something carry away.[1] In other words, every time the vessel scended the yards were braced in or up (according to which brace was taut) with a jerk, and due to different lead of the braces and length of the yards the angular change would not have been the same for both yards. And how little movement of the upper yard off with respect to the lower yard would have sufficed to sweep the men's feet off the yard!

All this—and more—would have been a high price to pay in order to avoid using a few fathoms of small rope. To command a polacre it was not necessary to be bereft of common sense

D. L. DENNIS

SEA TERMS IN RECENT USE AT APPLEDORE

Connexions with the village of Appledore which go back over many years have made me familiar with a number of terms and turns of speech in use among those connected with ships and the sea there. This acquaintance with local sea speech was much enriched by the numerous discussions with him which were a necessary part of the preparation for publication of W. J. Slade's autobiography *Out of Appledore*, recently reviewed in *The Mariner's Mirror*. Appledore, at the time of William James Slade's boyhood and young manhood, was the home of the last community in the United Kingdom to be dependent on wooden sailing ships for its livelihood. The forms of speech in use there may therefore be of some historical interest, and I think it worth while putting a few of them briefly on record in *The Mariner's Mirror*, even though in some cases the same terms were widely used elsewhere.

When a vessel was about to be put through the wind from the starboard tack to the port, or vice versa, the order was given, 'Stand by to let her come round!' or simply 'Stand by!'. The expression 'to go about' was not generally used, though it was sometimes heard. Thus a man might say of a vessel, 'I saw her go about', but he would be very much more likely to say, 'I saw her come round', in the vernacular, 'Ur's gone round'.

The common expression, 'Lee-oh!' was used as the executive order as the helm was put down. A single leg of a passage to windward was described as a 'tack to windward', never as a beat to windward. A vessel making a series of legs to windward and going round between each one was, on the other hand, said to be 'beating to windward' or 'turning to windward'. The expression 'tacking' was never used to describe either this whole process or the act of going through the wind from tack to tack. The term 'a leg to windward' itself was understood and accepted, but it was very little used at Appledore. When a vessel on the port tack had to give way to one on the starboard tack the order to the man at her helm would be, 'Hard up!', or 'Keep her away!' depending on the circumstances.

I notice in the glossary of a recent book giving an account of a voyage in a square-rigged ship (*Farewell Windjammer*, by Holger Thesleff) the definition, 'Tack: to tack is to go about'. The very highly professional small-ship sailors and boatmen of Appledore forty years ago would have understood this definition, but they would not have spoken in these terms themselves. They did not use 'tack' as a verb at all and they rarely spoke of going about.

A vessel turning to windward was sailing 'by the wind'. As long as she had weigh on her by the wind she was said to be 'reaching', i.e. reaching through the water, however close to the wind she was sailing. Some vessels used to 'shram' their sterns down on the sea in bad weather when hove to with resultant damage and leaks in the sternlockers. Heaving to was therefore avoided and such craft were 'headreached' under very small sail. These were the only circumstances in which the term 'headreaching' was used. If a vessel had the wind abeam she was said to be 'sailing with the wind between the masts'. The expressions 'close hauled' and 'full and by' were interchangeable. They meant simply that the vessel was by the wind. If it was desired to let her fall off a little the order was simply, 'Keep her full'.

1 This circumstance is mentioned in enough of the old seamanship books that citation is probably not needed; however, I quote Bonnefoux, *Manœuvrier Complet*, p. 72, as he is more explicit than the others. 'In this case' (i.e. ship pitching but not with a very strong wind) 'it is perhaps better to haul the lee brace taut. If both were hauled taut one would probably lose a spar with the first lash that the pitching imparted to the masts.'

When the wind was aft side the beam the vessel was said to be 'going free', sometimes 'with the wind aft' was added. The term 'running' was also sometimes used to describe this point of sailing, but more customarily to describe the state of a vessel with the wind dead astern. She was then said to be 'running dead'.

The term 'vessel', which I have used above, was that customarily used to describe anything with a deck, but was of course applied most frequently to small wooden sailing and auxiliary motor craft. The term 'craft' was occasionally heard, but usually if the craft was not referred to as a vessel she was named by her rig, i.e. ketch, schooner, etc., but a ketch was often called a 'stick and a bit'. The term 'ship' was rarely used except of a full-rigged ship. Big fishing boats, even if they were decked, were 'skiffs'. Their boats, if they had any, were called 'punts'. A small fishing boat was a 'boat', as was also the boat on board a ketch or schooner.

When the banks were exposed on the ebb tide they were said to have 'ebbed up'. This term was used of anything exposed by a retreating tide, thus, 'the anchor so and so lost has ebbed up on the spring'. A moored boat afloat with the tide flowing was said to be 'overflowed' if the mooring line was too short for her to be pulled in to the customary boarding point when it was desired to use her. A vessel which had grounded and afterwards dried out on the tide was said to be 'high and dry'. When the tide came and she stirred slightly, as in her sleep, with her keel still resting on the ground and about to be, but not yet quite, afloat, she was said to be 'fleetin'.

An inhabitant of Appledore was an Appledorian. A seaman from one of the towns and villages on the Torridge and Taw Rivers behind Appledore, Barnstaple or Bideford Bar (take your choice as to what you call it) was a 'barman', his vessel a 'bar vessel'. If his vessel traded mainly in the Bristol Channel east of Appledore both he and she equally could be called a 'down homer'. To other barmen an Appledorian was a 'China man', an expression locally believed to have grown up in the mid-nineteenth century when, before the capital accumulation which led to Appledore's later shipowning period had taken place, many Appledore men were employed as seamen in eastern trading deep sea ships from other ports, among them tea clippers. A man from the village of Braunton across the estuary to an Appledorian was a 'Grasshopper', this arising from the old Braunton system of having a farm as well as a share in a vessel or of being a farm worker as well as a sailor. Appledorians and Braunton men combined to dub the men of Bude, outside the bar, as Bude Rats. This because they were the rats in the trap which was Bude Haven in the winter when 'the elements shut the door'.

When an Appledorian's wife had a child his first question to the midwife was, 'Is it a boy or a cheel?' Speaking to that boy or girl (for even fifty years ago Appledore women were still quite often at sea with their fathers and brothers) aboard a vessel an order would be given with a single imperative followed by 'you', thus, 'pull you' and 'easy you'. This was a normal term of expression and not especially emphatic. An order or instruction was frequently preceded by the expression 'Go ahead!' or rendered phonetically, 'Gowade'. Thus what the boy would probably actually hear in the example given above would be 'Gowade puell yew!'.

The Appledorian had his own names for things and places. Hurlestone Point in the Bristol Channel was 'Urtstone'. The Wolves Reef off Cardiff was 'The Willies'. Porthallow in Cornwall was 'Porthello'. The narrow alleys, products of eighteenth- and nineteenth-century building, which lead to the courtyards on to which many houses in Appledore open, are called 'drangs'. After the motors came in, and in consequence shorter passages and better food, the midday meal on board, the main meal of the day and always referred to as the dinner, often comprised a piece of fresh beef roasted on a dish of potatoes. This was called 'a schooner on the rocks'. I made a passage in one of the surviving Appledore vessels while drafting this article and we had schooner on the rocks for our dinner. To an Appledorian there was no such thing as a topgallant, rail, sail, yard, etc., nor even the 't'gallant' of the sea writers, or the 't'gallon' I have heard elsewhere. It was always 'degannel'.

Speaking of a man of the same physique he would say, 'He was the same built as me'. When the south-westerly gales came sweeping down on the coast carrying the rain almost horizontally the Appledorian working outside was soon 'flaytin wet'. If he was not a Lamey himself he was as likely as not related to that great family, but he would never hear it spoken other than 'Limmey'.

A pump-handle or windlass handle was a 'brake'. If a man wanted a rest from work he asked for a 'spell', but he could also do a spell of work, thus if ordered to work in some ballast on a vessel he hove in a spell of ballast. To take up a job was to turn to. As elsewhere a man knocked off at the end of a spell of work.

To continue a voyage was to get 'down along'. This term was used in particular in connexion with local vessels having loaded in the Bristol Channel going down past Bideford to a Cornish port or beach. Many Appledore vessels traded down along to the Cornish beaches. In this hard business much money was made by ambitious shipmasters. The toughness and resolution of such men as William Kingdon Slade, W. J. Slade's father, was in no small degree responsible for the great growth of prosperity in Appledore in this century. Such men and women were invariably referred to as 'hard cases'.

Their spirit is well epitomized by the story of the head of a ketch- and schooner-owning family who lay dying. Watched all night by his sons, at dawn he said: 'Blow out the candle lad, 'tis day and you'm wasting money.' He left over fifty thousand pounds. Of course there were others who 'laid to the ring of the anchor too long to pay a crew'.

Particularly in the last century the life was very hard and poor. Some of the work on the small fore-and-aft rigged sailing ships was extremely arduous. Thus 'a gaff topsail stowed aloft is a heller in comparison to a square topsail on a yard'. No wonder the hard cases were hard! In the days of W. J. Slade's grandparents, when his mother sometimes worked with her brothers at sea in her father's coasting smack life was so poor that, 'They had to work for their breakfast before they could eat it'.

When that breakfast was served, as with all other meals at sea, certain formalities were observed. Sitting in the mess-room, which many larger schooners had before the days of motors, or the cabin or 'day room' of the smaller schooners and the ketches the master sat on the starboard side of the table with the A.B. next to him. The mate sat on the port side with the O.S. next to him. The boy, when the crew were five, did the cooking. 'The food veered according to rank.'

When the bar vessels took and paid their men by the voyage the ship provided food as long as she was outside the bar. Once inside the bar the crew had to fend for themselves, and, as an Appledorian would say, the vessel 'went cold kettle in over bar'.

BASIL AND GILLIAN GREENHILL

SETTING OF GAFF TOPSAILS IN SCHOONERS

In *The Mariner's Mirror*, Vol. 45, No. 3, of July 1959, there appears a letter in 'Answers' by Mr Roy Rogers. The letter describes the method of 'setting gaff topsails in schooners', and is accompanied by an excellent drawing. The whole is so well executed that, perhaps, it were best to leave well enough alone. One small item I would question, however.

Mr Rogers says, 'One man goes aloft at each mast. When he reaches the gaff he crawls out and unhooks the sheet and carries it back with him to the crosstrees.'

If that is the manner in which Mr Rogers shifted topsail sheets in his schooners, I am astounded that he is here to tell the tale.

Surely he has forgotten? The sail was clewed into the crosstrees and if the wind were not too strong, it was held in the halliards, well above the masthead. The man sat astride the masthead, unhooked the chain-sheet from the clew-iron (remember the leather thong?) and dipped it under the spring-stay, again hooking it into the clew of the sail on the lee side. The manner of hauling up the tack and passing it down to the deck on the 'new weather side' was as Mr Rogers described it, and if he performed this little chore correctly on his first time aloft, I'll stand him a beer!

I once climbed out to the gaff end in a barquantine, to clear a fouled chain-sheet with the ship rolling in a heavy swell. As the ship rolled to windward, the peak halliards would slacken in a bight (I had my legs wrapped round them) and with the lee roll, the halliards would bring up with a snap! I am here to tell you that I never, never, never did it again.

ARCHIE HORKA

Exception is taken to the method described by your correspondent Roy Rogers for handling the gaff topsails of schooners when tacking.

I am indebted to Captain Harold G. Foss, Hancock, Maine, for the following description of the manœuvre, with which he is quite familiar since he owned and was master of large schooners.

'When the Captain gives the order "Ready About", the crew under the mate's directions clews the topsails up over the mast heads. The clewline runs from the tack up through a grammet (about three feet inside of the sheet cringle) then up to a block at the head, then down passes through a block fastened to a mast hoop half way down the sail and then on down to the deck. This clewline completely spills all of the wind out of the sail. The sail hangs about a foot or so above the mast head. After the ship tacks a man goes aloft, climbs up on top of the mast head. He takes the sheet sister hooks, takes out the leather fastener, dips the sheet under the Topmast stay and Spring stay and again hooks it in place on the leeward side. When the ship brings the wind on the other side the clewed up topsail automatically swings with the wind to the leeward side. There is no pushing the sail over. He shouts "Sheet home", pulls up the tack over the peak halliards, throws it down to leeward of the halliards and to windward of the gaff. The deck men then sway up the sail and lastly haul down the tack and make it fast to leeward of the mast in a belaying pin. There are no "Bee holes" in a topsail, they are in the Bowsprit and Jibboom where the Jib stays pass through. The topsails are bent on mast hoops—not jack stays. There is no crawling out on the gaff. No pushing over the sail. Ten minutes is long enough for a seaman to be off the deck when shifting over a topsail.'

WINSTON LANGDON

PLYMOUTH PORT ORDERS

Captain Gillespie's 'Record', in the February 1960 issue, concerning the Plymouth Port Orders of 1858, makes mention of one prohibiting public demonstration by ships' companies relative to their officers or to sentences of courts martial.

Doubtless other more pertinent instances will be cited, but one immediately at hand is contained in the *Memoir* of Vice-Admiral John Surman Carden, R.N., edited by C. T. Atkinson, and published at the Clarendon Press in 1912. Appendix 12 of this book records the results of the then Captain Carden's court martial in 1813, resulting from the loss of H.M.S. *Macedonian*. In conclusion it is stated that, upon Captain Carden's leaving H.M.S. *Santo Domingo* after his acquittal, the crew of that ship and his own remaining *Macedonian* crew manned the rigging and gave three cheers, the band striking up 'We will Fight and we will Conquer Again and again' (*sic*).

ROBERT F. WHITE

CAPTAIN SIR ANDREW SNAPE HAMOND

I am at present engaged upon a biographical study of Captain Sir Andrew Snape Hamond, Comptroller of the Navy, 1794–1806. I should be most grateful for the sight of any letters or documents of his in the possession of your readers.

W. H. MOOMAW

THE NOVEMBER GALE OF 1740

In November 1740 the 24-gun frigate *Dolphin* went through a gruelling experience in the North Sea. She was on her way from Sheerness to her station as guard-ship at Leith, and her captain was that Francis Holburne whose portrait by Reynolds, sturdy, resolute and rather phlegmatic, hangs at Greenwich where later he was Governor. Although a fine seaman he was not much of a hand with a pen, so I have taken some liberties with his punctuation, but with nothing else. Here he is, reporting to the Admiralty on 5 November, after bringing his ship back to Sheerness.

'. . . sailed from the Nore the 20th October—got into Yarmouth Roads next day, where we found many light colliers bound down. Here we mett the wind at N.W., dirty blowing weather, and continued at that and N.E. till the 29th. At Noon we went out with the wind at West, but was took with it Northerly and putt back again. The wind shifted to the West at night again and we went clear of all at Midnight again. Friday the 31st, got to the Northward of Scarborough where we was put under our Courses, the wind at N.W. so bore up for Burlington Bay where all

the light ships had got, and 2 brigantines came in after us from Holland and Sweden bound to the Northward. We got six men and gave as many in lieu, which poor fellows I fear are lost. The Colliers had all protections. In this bay we luckily sett the rigging up, got up preventer shrouds, and got down the top-gallant yards and masts. At 10 at night the Wind shifted to the S.W., a fine gale. We weighed and went out as did all the ships and vessels there bound to the Northward, I believe about 60 in number. The Wind continued until 9 next morning (Saturday November 1), when off Hartlepool it fell little wind all at once; we was pretty near the shoar as it was an offshoar wind and many poor vessels within us which, God knows what is become of them. The Wind flew about to the N.E., putt us past the topsails in less than a $\frac{1}{4}$ hour, and continued to encrease, that I think I never was in such a storm of wind where we was forced to carry the whole courses to clear Whitby rock, which we did not do near a mile, the hatches in the water the whole time. It pleased God the masts and canvas held which I every moment expected to go; if so must every soul perished. In the mean time the best bower anchor dropped under the fore-chains but providentially hung so long as to give us time to cut the cable and clear the hawse; so away it went, did no damage, but let in a great deal of water before we could stop the hawse. What with that and leaks in the sides and decks with straining, could just keep our own, the pumps continually going did not encrease, but then it was washing over the cables in the hold and had washed the ballast over to leeward (?)-y the cables had settled down. I consulted the officers and thought it was for the safety of the ship to throw the lee guns overboard which we did, all we could come at being 6. This we found eased the ship a good deal. At 1 o'clock hauled up the foresail, got down the yard but could neither reef nor furl it, so it soon blew away and glad I was to see it gone. The mainsail continued to stand fast and held the whole Gale for we durst not meddle with it to reef or he would soon gone to pieces which we looked every moment for, and could never have brought another too with that wind. The Gale continued till Sunday night at 12 o'clock, then abated a little. We kept up to go clear of the Lemon and Oare which we knew we was near, then bore away to the South of them. Monday the 3rd got up a new foresail and hauled in for the shoar. Yesterday noon made Orfordness, the wind at N.N.E. I thought it for the Service to bear away for Sheerness as we were so near and in want of 3 courses, 2 cables, 1 anchor, a long-boat, 6 guns, some ballast, much being pumped out, the whole Hold to be new stowed. One chainplate, the boom-iron on the foreyard, topgallant masts, yards, studding sail booms, and most everything else that was up on deck is gone. Some of the running rigging tore and lost, the wales and rowports made much water, and I believe it will be found necessary to put 4 more standards in the ship. I can't say if the head of the mainmast is wrung or not. It looked so to me once. I saw nothing of the ships after the gale came on, saw several pieces of wrecks yesterday, and some today coming up Swin. I must pray leave to recommend the good behaviour of the ship's company in general, who had not a dry thread on for 2 days and 2 nights, no sleep, nor little refreshment except a little Brandy I happened to have, which comforted them sometimes. It would be great Encouragement to them, would their Lordships be pleased to order them some Pay, as they have some 15 months due. I hope what I have done in this whole affair, which is as particular as I can relate, will meet their Lordship's approbation, and I shall think myself happy, and be very thankful we are all Safe at Sheerness where we arrived this afternoon, having laid in the Swin all night.

I am, Sir,
Your obedient and most humble Servant,
Fra. Holburne.'

So much for the captain's letter, and his journal adds that they had a good deal of sleet and snow on their way up the North Sea. There is something dramatic about the *Dolphin*'s ordeal. The providential setting up of the rigging in Bridlington Bay; the deceptive lull off Hartlepool, with so many luckless coasters well inshore; and then the sudden, murderous onslaught from the N.E., and the ship tearing along under full courses to clear Whitby rock, hatches under water, and anchor and cable hanging over the bow. All contribute to catch the imagination. Conditions were certainly severe, and not only in the North Sea, for 24 hr. earlier (on Friday, 31 October), the

great fleet under Sir Chaloner Ogle, with the troops for the attack on Cartagena, had been badly buffeted by a tempest of Finisterre. However, we are only concerned with conditions near home, and, as might be expected in the circumstances, the East coast shipping suffered heavily. On the day the *Dolphin* limped in to Sheerness the *London Evening Post* informed its readers:

'They write from Yarmouth that the storm began there on Saturday night about 7 o'clock, and at 8 it blew a terrible hurricane in which the shipping suffered more than it has done in any one time for 20 years past, great numbers of ships having lost their masts, cables, anchors, etc:, several drove ashore, 2 sunk in the roads, many drove to sea and feared to be lost, and that the coast was covered with dead bodies and pieces of wreck.'

Later reports confirm and amplify this. Between Lynne and Yarmouth about sixty sail were driven ashore. Thirty dead bodies were washed up at Yarmouth. There were eight vessels ashore near Cromer, nine between Ostend and Calais, and a fine Dutch East Indiaman of 40 guns off Boulogne. Of the ships reported by name, most were colliers from Newcastle and Sunderland.

Particular reports are varied and interesting, and not confined to ships at sea. The *Rupert*, victualling at Blackstakes, was so damaged that she was ordered back to Chatham Yard, where she had just been refitted. At the Nore the *Catherine* (yacht) drove down on the *Royal Escape*, put her ashore, and broke her own bowsprit which penetrated the *Catherine*'s stern window and demolished two lanthorns. At the height of the storm on Saturday night 'a prodigious quantity' of the lead on the roof of Greenwich Hospital was blown off, part of the wall of Hyde Park came down, and at about eight that evening one of the spires of Westminster Abbey fell.

It is evident from all this that the *Dolphin* must have been a well found ship, and well handled. She was soon ready for sea once more, and sailed again on 26 November. The Admiralty, not so heartless towards the poor sailor as is sometimes supposed, was sufficiently mindful of Captain Holburne's request, as to direct that her books be made up to the end of June, which meant ten months pay for everyone. Her survival on this occasion was fortunate for the Naval fame of Great Britain: one of her lieutenants was a certain G. B. Rodney.

J. D. SPINNEY

Sources

P.R.O. Adm. 1/1881. Captain's letters. Adm. 51/256. *Dolphin*. Captain's log.
London Evening Post.
London and County Journal.
Daily Gazeteer.

THE QUEEN'S FLAGS

(*M.M.*, Vol. 43, No. 4, p. 267)

This is a belated comment on the article 'The Queen's Sea Flags' by A. Peacock, *M.M.*, Vol. 43, No. 4, 1957.

In discussing the evidence bearing on the flags worn by the *Naseby* on the return of Charles II in 1660 (*M.M.*, Nov. 1957, p. 267 *et seq.*) no mention is made of what appears to be a pertinent passage and drawing in *Barlow's Journal*. In 1660 Edward Barlow was apprenticed to the Chief Master's Mate in the *Naseby* and was present at the embarkation of Charles II. He describes the ship's appearance at that time in the following words: '. . . our ship flying three silk flags, one being the standard of England, another having the anchor and cable in it belonging to the Duke of York, and the other all red, with sixteen silk "pennants" or "streamers" and a silk jack, also a silk "ancient" with nine streamers of another sort,. . .' (*Barlow's Journal*, Vol. 1, p. 43, B. Lubbock, ed., 1934). Lubbock also reproduces from the manuscript journal a drawing in colour which is described as: 'The Shipp *Royall Charles* that was in the year 1660 when she returned with his Majesty, King Charles, on his Return to England at the Restoration.' At the main is a flag recognizable as intended to represent the Royal Standard, the anchor Admiralty flag (but with a blue anchor stock) flies from the foremast, and a plain red banner from the mizzen. The jack is the Union flag, while an ordinary red ensign is hoisted at the stern. Just below each masthead flag, and from each yard arm, flutters a long red pennant bearing the St George's Cross. The flag arrangement thus differs from the conventional pattern in the absence of the Union

from the mizzen; on the other hand, Barlow states that the anchor flag was definitely flown. In one respect Barlow corroborates the testimony of Homewood to Pepys. In the background of the drawing are two ships, one flying the Union flag at the mizzen, and the other has the Union at the fore. These are presumably the *Swiftsure* and the *London*, so described by Homewood.

I know no more about the background of *Barlow's Journal* than is given by the editor in his brief preface. Lubbock there states that these chapters were written during 1673 when Barlow was a captive of the Dutch in the East Indies, i.e. 13 years after the Restoration. Perhaps some more knowledgeable member would care to comment on the degree to which Barlow's testimony is valid and pertinent.

HERBERT GOLDSTEIN

LISTS OF DIMENSIONS

The List of Dimensions printed by Dr Anderson in the *Mariner's Mirror* for November 1957 is of exceptional interest, as it is most unlikely that any earlier list will be found giving the same amount of detail. It must be remembered that the unit of size in which ships were measured was primarily the Ton Burden, and that the Burden in tons had for long been based on a ship's actual capactity to carry casks of wine. Baker's paper of 1582 did not lay down a formula for calculating tonnage, but merely suggested a means by which one might estimate the tonnage of a ship without actually proving her capacity to carry casks: he proposed to compare the product of her length, breadth and depth with that of the dimensions of another vessel of known capacity. Baker did not suggest a universal divisor, and neither was one mentioned by William Borough in his paper of slightly later date introducing several refinements in Baker's method. It is therefore improbable that the divisor of 100, used in the List of 1590/1, could have been introduced in place of Baker's comparison much earlier than 1590.

The new rule had, however, one important immediate effect: it now became desirable (if not actually necessary) to include the main dimensions as well as tonnage in ship lists. At first, no doubt, there must have been many difficulties. There would be uncertainty as to the actual points of measurement, and the likelihood of the measuring tapes or cords stretching in the damp conditions of a dock. Further errors would arise when the same ship was measured by different persons. We may also expect that some vessels might not be available for re-measuring when new lists were compiled, and that either contract dimensions or figures from earlier lists would then be used.

This brings us to the question of the accuracy of these early lists. Dr Anderson has noted that the 1590/1 list is suspect in so far as several ships, or groups of ships, are shown as having identical dimensions, and mentions that even at a much later date ships built to the same design almost always differed a little in their final measurements. This last is certainly true, and applies even in these modern times of mass production. It must, however, be remembered that in the earliest lists it is apparent that the compilers or measurers were in most cases content to work to the nearest foot (or whole foot), and only deigned to mention inches when dealing with the smallest dimensions. This practice might conceal quite material differences between individual vessels. In the case of the *Revenge* and *Defiance*, built in 1577 and 1590 respectively, the identical dimensions are certainly suspicious but not impossible. In the other instances mentioned by Dr Anderson, however, it is quite possible that the list is not misleading, and it will probably be of assistance to tabulate the dimensions of these ships as taken from other sources. (The contract figures are taken from S.P. 12/224, 83 and Otho E. VII, 223.)

Ship and builder		Keel	Beam	Depth	Tonnage
Revenge, 1577	List 1588	—	—	—	500
	List 1590/1	92	32	16	471
	Contract	92	32	15(?)	—
Defiance, 1590 (Pett)	S.P. 12/276, 57	92	32	16	471
	List 1590/1	92	32	16	471
	List 1602	92	32	15	441
	Contract	66	26	—	—

Ship and builder		Keel	Beam	Depth	Tonnage
Quittance, 1590 (Baker)	List 1590/1	66	26	12	206
	List 1602	64 [65]	26	13	219
	Contract	60	25	—	—
Answer, 1590 (Baker)	List 1590/1	66	26	12	206
	List 1602	65	26	13	219
	Contract	60	25	—	—
Advantage, 1590 (Pett)	List 1590/1	60	24	10	144
	List 1602	60	24	12	216
	Contract	60	25	—	—
Crane, 1590 (Chapman)	List 1590/1	62	25	13	210
	List 1602	60	26	13	202
Advice, 1586 (Baker)	List 1590/1	50	14	7	49
	List 1602	50	14	6	42
Spy, 1855 (Pett)	List 1590/1	50	14	7	49
	List 1602	50	14	6	42
Makeshift, 1586 (Pett)	List 1590/1 (Missing from 1602 list)	50	14	7	49

In the above list I have included the *Advantage* and *Crane*, as it is clear that vessels were more likely to be of similar dimensions if built by the same builder, or if ordered at the same time (presumably on identical contracts). It will be seen that the compiler of the 1602 lists had apparently relied upon fresh measurements, but still agreed that the *Quittance* and *Answer*, and *Advice* and *Spy*, were respectively of similar dimensions. Further confirmation of the independent accuracy of the two lists may be gathered from the fact that (with the exception of the *Mary Rose*, *Lion*, *Crane*, and vessels re-built in the intervening period) in no case do the dimensions of any ship vary more than 1 ft. It is true that the depth often varies more, but this was not taken from a constructional point but from the height of breadth, and this latter would be difficult to decide in a vessel planked inside and out.

Taking everything into consideration, and allowing for the clerical errors, there appears to be little reason to question the accuracy of either list.

W. SALISBURY

FIGUREHEADS, 1800–1815

(*Note*. This was written in 1925, probably a little before the appearance of *Old Ship Figure-Heads and Sterns*, in which some of the facts are repeated.)

What follows is the history of a somewhat desultory search which was begun to elucidate a doubt affecting a single figurehead and ended by illustrating a transitional period.

A story which had a very long vogue was that at Trafalgar the *Victory*'s figurehead had a bluejacket and a marine as supporters of the Royal Arms. Indeed, it was not until 1924 that this fable was laid to rest.[1] Tradition amplified this simple story and related that not only had the bluejacket supporter an arm shot away in the battle and the marine a leg, but that, by what would certainly have been a most remarkable chance, 'all the men who lost arms on board the *Victory* were sailors and those who lost legs were marines'. It so happened also that a couple of figures, believed to be the identical bluejacket and marine, existed and still exist in Sheerness dockyard, each being entirely legless and armless. We were to believe that the remaining legs and arms had been removed to balance matters; but tradition took no account of why relics of the *Victory* should have come to Sheerness, a port where she never refitted.

Edward Fraser was the first to unearth some of the facts bearing on this story.[2] He discovered

1 *M.M.* 1924, p. 197. 2 *M.M.* 1922, p. 299.

that it originated in a paragraph which went the round of the London press in January 1806, and also that, when the *Howe*, a first-rate of 110 guns, was launched in 1815, a newspaper paragraph attributed to her too a bluejacket and a marine as supporters of the figure of the head.

Starting from these few facts it was possible to construct a theory. We now know that in 1802, when the *Victory* was under repair at Chatham, the dockyard officers were ordered to get out a design for a new figurehead for her. We know too that they exceeded their instructions and did in fact send three designs to headquarters. A choice was duly made and all three drawings were returned to the yard. There is no doubt as to what the design was that was used for the *Victory*; the question is what were the other two designs and what became of them.

This is certain: that as the designs were all intended for a first-rate, each of them must have been in the form of a device with supporters. They could therefore only be used for first-rates. Now the dockyard having these designs available would hardly be likely to waste them. It is therefore a strong presumption that one of them would have been brought forward for the next first-rate built in the yard; and it so happened that the next such ship was the *Howe*, which though ordered in 1806 was not completed till 1814.

Assuming then that one of the alternative designs introduced a sailor and a marine, it is not difficult to see how these supporters might have been used for the *Howe*, as being entirely appropriate to the memory of the great sailor whose name the ship bore.

Thus, with these considerations added to the newspaper paragraph of 1815, it became easy to believe that the *Howe* really had these supporters; and this belief was confirmed by the fact that the *Howe* was eventually broken up at Sheerness in 1853, the most likely place in which to find relics of a ship being that in which she was taken to pieces. Thus it seemed to have become tolerably certain that the mystery was explained: that these supporters had in fact belonged to the *Howe* and that their association with the *Victory* was due to their having been originally designed for her.

This belief received a rude set-back by the discovery of a print of the *Howe*, which, so far from showing a figurehead with these supporters, showed no more than a simple bust of Neptune with no supporters at all. The print was after Huggins, who could be trusted not to make a mistake in such a matter. At first sight it seemed that the theory must go by the board and a solution be sought elsewhere, but further consideration showed that there might be an explanation of the difficulty. To begin with, there was the regulation to reckon with, that the proper form of figure for a first-rate at the time when the *Howe* was built was a bust or device with supporters; there was evidence of this in the figurehead given to the *Victory* in 1815, which still survives, and in the model at Greenwich of the *Howe's* sister ship the *Nelson*, which has a bust of the Admiral with Britannia and Fame as supporters.

This was encouragement to look further, and it was in consequence discovered that on 10 December 1835, in response to an Admiralty order, an estimate of 25 guineas was submitted for carving a new figurehead for the *Howe*,[1] 'a bust of Neptune and 2 rich foliage scrolls with the Arms of Howe on each side tastefully executed'. It also appeared that the old figurehead was rotten. This discovery went a good way towards removing the difficulties; for, as in 1835 the *Howe* was repaired at Sheerness, it would be natural that the remains of her old figurehead should be found in the dockyard there.

But the sources were not yet exhausted and it seemed possible that a definite account of the *Howe*'s first figurehead might be found among the Navy Board papers, since the estimates for proposed carved works, sometimes with rough sketches attached, have been preserved in the letters from the dockyard officers to the Board. A search here[2] gave useful results. It upset the theory in detail, but confirmed it in general; and it afforded valuable information as to the official attitude towards carved works in the period from Trafalgar to the peace of 1815.

It appeared that on 13 February 1809 the Chatham officers submitted a design and estimate for a figurehead for the *Impregnable*, a 98-gun ship building there. The sketch has disappeared, but

1 Adm: Controller, In Letters (Ships).
2 Navy Board, In Letters, 1821–1824.

there remains on the fly-leaf of the letter a rough pencil sketch made not by the Chatham officers, but by someone at headquarters. This shows a double figurehead from the starboard side: a bust on top of the knee, seemingly a shield under it, a bluejacket as a starboard supporter. Whether the other supporter was a bluejacket or a marine cannot be decided, but at any rate the bluejacket is not unlike the relic at Sheerness. The accompanying estimate was for £60, which confirms the belief that the original sketch was of a double head, for the *Victory's* double head of 1802 cost £50 and that of 1815 cost £65. A single head cost less than half as much.

The Navy Board's modification, probably a simplification, of the design was sent back to the yard with instructions that it was to be followed and a new estimate sent. The new estimate was £45 and this the Board—as was their way—cut down to £35. There was no appeal against such decisions of the Board, but no doubt the carver made allowances for such developments in getting out his estimates. The Board in allowing £35 informed the officers that this was 'the sum allowed for first-rate ships whose heads have been similar'. It was in fact the sum paid for the head of the *Caledonia*, launched in 1808, the only first-rate built since £50 had been paid for the *Victory*'s head in 1805. The *Caledonia* had merely a bust with thistles and bagpipes.

The inference seemed to be that a design like that believed to have been used for the *Howe* had been put forward for the *Impregnable*, modified and adopted. Could the relics at Sheerness therefore have come from the *Impregnable*? The 'Progress Books' showed that they could not, for the ship was never repaired at that yard. But it was at least unexpected to find that a second-rate, as regards her figurehead, was being treated as on a par with a first-rate, though the *Caledonia* had been subnormal in that respect. It is not indeed certain that the head adopted was a double head, but it is tolerably certain that that submitted by the officers was so. In the same year the head proposed for the *Prince of Wales*, also a 98, was estimated and approved at £35—it could not have been otherwise in view of the late precedent—but it was a single head consisting of a large bust with an eagle close under it on each side.

Then came the *Howe* on 27 May 1812 and it is sad to say that after all it is certain that neither of the alternative drawings got out for the *Victory* in 1802 was used. The covering letter said: 'enclosed is a proposition for the head of H.M.S. *Howe*, designed and drawn by Mr Peake, foreman of the new work in this yard, which we submit'. The carver's estimate was £75, which makes it certain that it was a double head; but unfortunately the sketch is missing. The Board approved the design, but as to the price said that it 'may be settled after the work is performed', a decision which did not promise too well for the carver. The Navy Board recognized that in this head there was more than twice the amount of work that there was in the heads recently approved at £35.

Is it then permissible to say that the figures at Sheerness to-day are the supporters from the *Howe's* first figurehead? The answer must be that it cannot be taken as an established fact, but only as a very probable suggestion with much in its favour and nothing, at present, against it.

What is perhaps of more importance is that these bundles of records illustrate the general progress, or decline, of carved work during several years. Part of the story does not belong here, but we have the following prices for figureheads for the lower rates. For a 74-gun ship £21 as the usual price, but once £16 and once an estimate for that amount cut down to £10. For a frigate £6 in eleven instances and once £5. For sloops £3, but in one instance £4. In two cases a scroll or fiddle-head was ordered, but one of these was a mere gunboat and the other a prize not likely to be commissioned. Bills for repairs of the carving of older ships make some comparison possible. Apparently the line-of-battle ships had whole figures 'enriched', which meant that trophies or some other devices were added. Thus the Warrior had on each side 'a trophy 6 ft. long and 3ft. wide cut with flags, battle axes, spears etc.', which must have been on the upper part of the trail-boards; and the *Albion* had a winged figure, apparently with a trumpet in each hand.

The frigates all had a simple bust, placed on a stand with scrolls of foliage. The busts were extraordinarily haphazard. It is possible indeed to see some connexion between the name *Greyhound* and a bust of Diana with a trophy of bow, arrow and hunting horn; but there is no apparent suggestion of a helmeted and bearded warrior in the name *Blonde*; nor does it seem congruous that the *Apelles* should have a woman's bust, or the *Sheerwater* a man's bust. Clearly mythology was

a strong point, either in the dockyards or at the Navy Board. What is perhaps an extreme case is that of a prize named the *Nyaden*. The dockyard did not know what this meant; indeed they could not even remember it, for they called her the *Nymphin* in their correspondence. And as the *Nymphin* they chose a female bust for her figurehead.

(*Note*. *Nymphen* and *Najaden*—the *en* is the definite article—were two distinct ships, though sisters. Both were taken at Copenhagen in 1807.)

The late L. G. CARR LAUGHTON

TRIPLE LOWER WALES

Although triple lower wales are fairly common in pictures of seventeenth-century Dutch vessels, both naval and merchant, they are rarely found in English ships. Perhaps the best known examples are the model of a 90-gun ship in the National Maritime Museum and the rigging plan of the First Rate in Deane's 'Doctrine of Naval Architecture' at Cambridge.

It is therefore of some interest to note one ship in which they appear to have been fitted instead of the normal double wales. In a shipwright's notebook preserved in the British Museum (Catalogued as a printed book, 534 K. 5) the following notes appear on the back of a page giving details of the *Berwick*, built at Chatham in 1679:

Depth of the lower wale	1 ft. 1¼ in.
2nd Wale	1 ½
3rd Wale	1 —
Distance between them	1 ¼
	1 1½

The total depth of the wale would be similar to that of the usual double wales, and it is possible that the triple wale was proposed in order to allow smaller scantling timber to be used than would be necessary for the customary double wales.

W. SALISBURY

MODERN CLOSE-HAULED SAILING

Sir Alan Moore, speaking of modern Bermuda-rigged yachts, says: 'It is said that the larger decked boats can sail at two points from the wind.'

In the course of development work on small sailing yachts, I have made a particular study of this question of close-pointing, and have discussed it with various leading yacht-racing helmsmen. In my opinion, the facts are as follows:

(1) Taking the expression 'close-hauled' to mean the point of sailing on which a boat makes its best progress to windward in smooth water, then there is very little variation (say, not more than two or three degrees) between the close-hauled courses of the best modern racing classes, regardless of size. That is to say, a 12 ft. National dinghy will point as close to the wind as a 12 metre. What difference there is can be attributed more to minor characteristics of the hull and sail plan than to size.

(2) The best yachts will not point effectively much closer than four points to the true wind—certainly not as close as 3½ points.

(3) As even the best yachts make at least three degrees of leeway, the course made good can be taken to be 4 points from the true wind.

(4) Since the larger yachts are sailing much faster than the smaller ones, the 'apparent wind' which they feel (i.e. the resultant of the true wind combined with the wind made by the yacht's own progress) can be shown to be finer on the bow than the apparent wind experienced by a dinghy sailing the same course. To this extent only, the larger yacht may be said to be sailing closer to the wind than the smaller.

H. G. HASLER

FRACTIONAL SHAREHOLDING

(*M.M.*, Vol. 45, p. 301)

It is to be hoped that Mr R. C. Jarvis's recent article on this subject will put an end to many of the complicated theories which have been advanced to explain why the property in any British ship is divided into 64 shares. He has shown very clearly that this was adopted in 1824 as a purely arbitrary figure, but could have said more to justify Hume's decision that *all* ships were to be divided into the same number of shares.

The purpose of any Register of property is to record the legal ownership, to the end that a purchaser may know exactly what persons can give him a legal title and may be free from concealed equitable interests. The Registrar of Shipping is by no means alone in refusing to acknowledge such interests. Mr Jarvis has shown that Hume was interested in the executive machinery, and Hume had every right to be concerned with this aspect: he had to ensure that his system, once started, could be operated without undue clerical work. He probably saw, more clearly than the West India Committee, that the property in vessels or parts of vessels changed hands very frequently, and that the purchasers of a ship originally divided into x shares might well wish the new shareholding to be in a different ratio. This would entail basic alterations in the Register. Furthermore, he may well have been alarmed by such examples as the Clyde steamers quoted by Mr Jarvis with very large numbers of part-owners. Realizing that ships were being owned in very small shares, Hume probably decided that: (1) for the Register to be at all manageable there must be a limit to the number of owners to be entered on the register, and there must be no alteration in the number of shares into which a vessel was originally divided; (2) to allow for a wide spread in shareholdings if necessary, and also to permit fractional holdings to be as elastic as possible, the number of shares must be as high as convenient. Having decided this, Hume would have to select an arbitrary number. He might, as with some Registers, have pitched on 100 as having advantages, although from the point of view of factors it is little better than 64.

Of the many examples of shareholdings given by Mr Jarvis, the vast majority are from the outports. Any government official wishing to obtain information about the system of ownership in vessels would, however, certainly first approach maritime circles in London, the largest shipowning port in the world. Almost inevitably he would find that the most prominent men in shipping circles were the managing owners of the ships chartered to the East India Company, and that this business was conducted upon highly conservative lines based on practices almost two centuries old. How far London shipowning in general was affected by the example set by the owners of Indiamen I do not know; I should, however, expect the practice in London to have been more standardized and sophisticated than in the outports. There is in the National Maritime Museum a large collection of seventeenth-century Bills of Sale which might throw some light on this question. In the case of Indiamen themselves there is relatively ample evidence, in addition to the three examples quoted by Mr Jarvis, to show that ownership of shares was based on a binary division from comparatively early times, and the following examples are taken from B.M. Add. MSS. 22183/5, East India Company Court Minutes, and India Office Library Mar. Misc. 530/4 (in that order):

1639. Bill of Sale of 7/16 parts of the *Valentine* of London.
1680. Bill of Sale of 1/16 part of the *Prince*, formerly the *East India Merchant*.
1680. A list of 21 owners of the *Beaufort* shows that the shares were in 32nds. Holdings varied between 1, 2, and 4 shares.
1681. Assignment by Robert Thomson over 1/32 part of a new ship, out of the 1/16 part he had 'undertaken to hold'.
1686. John Nicholson, Commander of the *Beaufort*, writes to Sir Henry Johnson enclosing his attorney: 'I desire to have a 1/32 part in Capt. Cooke's ship, a 1/32 part of Capt. Haddock's ship, and a part of Capt. Pearce's ship...'.
1703. Protest re non-payment under a Bill of Sale of 1/8 part of the *Abingdon*.
1710. Bill of Sale over 1/8 part of the hoy *John and Elizabeth* of Aldburgh.

An undated 'List of Sir Hy. Johnson's Writeing of Merchantmen' names 38 vessels. In every case but one his share is expressed in 32nds. The solitary exception is a West Indiaman in which he held a 1/56 part, and this must have been very exceptional, as the value of this holding is expressed in pounds, shillings and pence, instead of a round number of pounds as in the other cases.

The *Beaufort* and other ships after her were very large vessels, and their cost may have been responsible for the division into 32nds. A little later the East India Company was finding it difficult to obtain offers of ships for chartering. Some of those offered 'wanted owners to complete the subscription to set them out to sea', and the Company was forced to take up the missing shares:

23 Nov. 1694. The *New Sceptre* wants 7/16 of her owners; the Company takes up a one quarter share.

15 Feb. 1695. The *Russell Frigate* cannot get to sea in time for want of owners; the Company takes up a 3/16 share.

6 Novr. 1695. The *East India Merchant* wanting owners, the Company took a 1/4 share, and four of the Directors a 1/16 share apiece, 'making one half in all'.

14 Feb. 1696. The *East India Merchant* still wanting 1/16 part of her owners, the Company take this up 'over and above their moiety'.

The next good examples come from the 1780's. On occasion, a managing owner would disagree with his co-partners and be displaced, and the Company might be faced with two persons each claiming the right to make a contract. In 1786 the *Belvedere* was built, the subscribers taking 1/16 shares and John Fiott was appointed managing owner. In 1793 the owners of 10/16 of the shares appointed Samuel Bonham in that capacity. It may be noted that when the ship was first tendered, in February 1786, the tender was signed by three owners, one of whom signed 'for himself and three other shares' (unspecified). Between 1786 and 1790 a large number of tenders, and requests to build new ships, specify the shares held by the signatories. There are many instances of odd numbers of 32nd shares, but the vast majority are expressed in 16ths, odd or even. This, together with several instances such as '8/16ths and 1/32nd', gives the impression that the normal number of shares was 16, and that the 32nds were regarded rather as half shares.

In view of the above, it would be logical to assume that Hume consulted the 'best' practice of his day, noted that 32nds were in common use, but made provision for what he thought would meet the future needs of the mercantile community by further subdividing the 32nds into 64ths. He probably regarded this figure as the limit for the purposes of the Register.

To wind up, it is most unlikely that the Prize Acts had any influence on this question. The 'eights of eights' only affected the proceeds from the sale of prizes—ship and cargo. I know of no instance in which a prize was registered in the names of the captors—nor would this have been practicable. The value of a prize could only be ascertained by selling her by auction, and the purchaser would derive his title and get his Bill of Sale from the Court. Does any member know of any exceptions?

W. SALISBURY

Mr R. C. Jarvis's interesting and entertaining article on the history of fractional shareholding in ships led me to look through my notes on the history of shipbuilding in Ipswich, 1600–1850.

In these years smaller craft and newly-built vessels seem to have been wholly-owned. I have found no reference to a 32nd before 1730, and the first reference to a 64th was not until 1825.

In the seventeenth century deeds refer to quarters, eighths, sixteenths and thirty-seconds of vessels from a pink of 90 tons up to vessels of 300–350 tons. The only half share I have found was for a wherry of 12 tons in 1656.

The majority of the shares in the eighteenth century were halves, quarters, eighths and sixteenths. But in 1758 there was sold 1/20th share of a sailing vessel of about 50 tons, the property of a bankrupt merchant. In 1779 and 1780, when two other merchants became bankrupt, 1/3 shares in small coasting vessels were advertised for sale. When another merchant died in 1775 his executors sold 1/3 of a lighter of about 40 tons and 2/3 of a lighter of about 35 tons. The oddest share of all was 1/13 of a Harwich fishing vessel in 1777.

The *Constant Trader* of Ipswich, 96 tons, Francis Newson master, is mentioned in bills of sale in 1816 and 1825. In the first case, the shares mentioned were 2/10 and 1/16, and in the second case they were 8/64 and 2/10.

These independent sources confirm Mr Jarvis's finding that the 1/64 share was in no way customary before the nineteenth century.

A. G. E. JONES

I should like to thank Mr Salisbury and Mr Jones for their interesting contributions.

Mr Salisbury, however, seems to start from the assumption that the purpose of ship registry was 'to record the legal ownership, to the end that a purchaser may know what persons can give him a legal title'. Although it may be true that this was a later (and somewhat incidental) outcome of the registry system, registry itself had no such original purpose. Its purpose was in fact not legal at all; it was mercantilist, that is to say, it was to provide a piece of administrative machinery which should confine certain privileged trade to certain privileged ships (preamble, 26 Geo. III, cap. 60). The development into a legal property-register is an interesting aspect of later registry, an aspect (incidentally) that has never been properly studied.

Nevertheless, I am very interested in the evidence Mr Salisbury brings forward of the great frequency of 1/16th holdings among East Indiamen. For my part, however, I have not been so much concerned to show how relatively common or otherwise the binary re-division of shares in a ship (down to the 16th or 32nd) may or may not have been at any particular time or in any particular class of trade. The point is, it is usually held that the practice was *invariable*. I am concerned therefore only to demonstrate from irrefutable record sources that it was *not*. I said (p. 308) that it has in general been accepted that this binary re-division had already become invariable before it was made statutory. Although anyone moderately well acquainted with record sources can quite easily cite references that indicate conformity with this assumption, yet it is just as easy (p. 309) to cite a fair number of instances to the contrary. To multiply instances, therefore, proves little.

It is true I cited a large proportion of cases from outport records: I could more conveniently have confined myself to the port of London. It happens, however, that I have visited every 'port', 'sub-port' and 'creek', and have studied the surviving registry and other records at every present and extinguished port of registry in this country. I was concerned, therefore, to take the opportunity to cite record sources until now entirely neglected—and indeed, in some cases hitherto unknown—in the hope of attracting the attention of other researchers to surviving records well worthy of more detailed study.

With regard to prize practice, I do not think I implied that the prize acts themselves had any direct effect upon registry. What I suggested was that Hume's administrative experience must have familiarized him with the 'eights of eights', which may be met in prize proceedings. I think I can claim to be very familiar with the unpublished manuscript sources of the administration with which Hume had until now been primarily concerned. (Indeed I had, for example, the great pleasure and stimulating experience of being associated with the research my friend Dr C. R. Fay did in this field preliminarily to his study of Huskisson.) From a background of that familiarity I do not agree that Hume, finding from the 'best' practice of the day the 16th and 32nd to be in common use, made in the 64ths 'provision for what he thought would meet the future needs of the mercantile community'. On the contrary Hume, knowing that such computation of shares was not in fact habitual, hoped 'in a short time' it would '*become* habitual' (p. 318), that is to say, he hoped that 'the future needs of the mercantile community' would adapt themselves to the new computation.

I agree with Mr Salisbury that once Hume had decided to limit the registrable fractional holding of shares, he decided upon the limit of 64 as being 'as high as convenient', but I do not agree that this whole scheme was in any way convenient. I had hoped the examples quoted on pp. 312–15 would prove the very contrary.

Mr Salisbury's remarks about more than one part-owner of a vessel claiming the right to make a contract should be read in the light of the distinction made on p. 312 between joint-ownership

(and partnership) and ownership-in-severalty. This is another intricate piece of law which the few who have written hitherto about ship registry have ill understood.

Mr Jones's evidence of tenths (or a fifth) as late as 1825 is of particular interest.

RUPERT C. JARVIS

QUERIES

21. (1960.) The peg-top mid-section form. On a number of occasions, in discussion of fast-sailing ships, and in references to the Symondites, the early use of the peg-top mid-section form has been mentioned. In Vol. 43, no. 4, November 1957, Carr Laughton remarked that: 'We know, quite apart from Symonds, that this peg-top model has given satisfactory results in small vessels . . . at any time from, say *1680* to the present time.' Are there drafts prior to 1739 showing the peg-top or heart-shaped mid-section? I am most desirous of references to any drafts prior to 1739–40 having such a form. It is my opinion that the basic hull form of the American Baltimore Clippers and pilot boats was a development of what was known earlier to British—and to British Colonial—shipbuilders concerning the design of fast sailing vessels. It is evident that the influence of the Bermuda Sloop was very strong in the Chesapeake Bay country prior to 1750 and that the Bermuda Sloop was a direct descendant of the earlier Jamaica Sloop, all having the peg-top section in some degree apparently, as well as the very raking ends below the load water line. The profile of these vessels certainly shows a normal development of the use of rake of post and sweeps of bow rabbet that are referred to in *Fragments of English Shipwrightry*. But the sharp section is not referred to in this source, so far as my notes show, and I have no copy of a draft earlier than 1739 showing even a moderate use of straight, rising floor. Were it possible, the establishment of the use of the peg-top section in the late seventeenth century would certainly indicate the appearance of the weatherly and fast 'clipper' form and therefore, I suppose, the 'first clipper' in the modern sense.

HOWARD I. CHAPELLE

22. (1960.) *Johannes Specht*. A ship's bell at South Pier, Gorleston-on-Sea, is inscribed 'Johannes Specht/Rotterdam/1755 A.D.'. The bell is reported to be fairly large and may have come from an Indiaman. Is anything known of the *Johannes Specht* which could explain why her bell is at Gorleston?

P. KERSHAW

23. (1960.) Captain Harrison's career. Two silver cups still in the possession of my family bear the following inscriptions:

1. Victory: The gift of the Grocers of Kingston upon Hull to Captain Wm. Harrison for his gallant defence of the ship *Jupiter* in beating off a French privateer of 12 guns on the 29th December, 1796.

2. The gift of Benjn. Wood Esq., Managing Owner of the Brig *Fame*, to Mr William Harrison, master of the said brig, as a gratuity for his exertions and attention during his command of her.

Captain Harrison died on 13 March 1815, on board the ship *Bradford*, lying in the Thames. Are any details known of the *Jupiter*'s action of 29 December 1796 (believed to have taken place off Yarmouth); of the three ships referred to above; or of Captain Harrison's career?

LESLIE HARRISON

24. (1960.) 'Armada Chest' in Brookland church. In a pamplet describing the church of Brookland on Romney Marsh, a chest now used for church documents is said to be 'believed to have been salvaged from a Spanish Galleon after the defeat of the Armada in 1588'. A footnote reads as follows: 'One Spanish ship was wrecked in the Camber [near Rye] and many treasures were recovered from her.'

I think I am right in saying that no ship of the Armada was wrecked anywhere in the neighbourhood; but the story must rest on some foundation. What is it?

R. C. ANDERSON

25. (1960.) H.M.S. *Sylph* and Commander Dickens. In connexion with a research project I am undertaking I would be most grateful for information about H.M.S. *Sylph* and Commander George Dickens, R.N. He was born in Durham, entered the Navy in London at age 16 in 1799. He served in the following ships: H.M.S. *Ardent*, 1799 to 1801; H.M.S. *Bellona*, 1801 to 1802; H.M.S. *Caesar*, 1802; H.M.S. *Diana*, 1802 to 1805; H.M.S. *Peteral*, 1807 to 1808; H.M.S. *Ferret*, 1808; H.M.S. *Somers*, 1808; H.M.S. *Barbara*[1], 1808 to 1811; H.M.S. *Africa*, 1811 to 1813; H.M.S. *San Domingo*, 1813 to 1814; H.M.S. *Sylph*[1, 2], 1814 to 1815.

1 Was in command of these ships. 2 Lost his life in wreck of this ship.

FREDERICK P. SCHMITT

26. (1960.) Wrecks off Hayling Island. A resident of Hayling Island has submitted to the British Museum five silver coins which he 'found at various times whilst walking along the sea shore'. They are badly waterworn, having lost from 25 to 45% of their nominal weight, but can be identified with confidence. All are French and of the same denomination, and all fall within the date-bracket *c.* 1575–*c.* 1625. They may be listed as follows, references being to J. Lafaurie and P. Prieur, *Les Monnaies des rois de France: François I à Henri IV*, Paris, 1956, and to H. Hoffman, *Les Monnaies royales de France*, Paris, 1878.

Henri III (1574–1589)

(*a*) *Quart d'écu de France*, date and mint-letter illegible, cf. Lafaurie & Prieur, 973.
(*b*) *Quart d'écu de France*, 1581? but mint-letter illegible, cf. Lafaurie & Prieur, 973.

Henri IV (1589–1610)

(*c*) *Quart d'écu de France*, date and mint-letter illegible but form of cross suggests Compiègne 1590–1595, cf. Lafaurie & Prieur, 1074.
(*d*) *Quart d'écu de Navarre*, 1606 and (?) Saint-Palais, cf. Lafaurie & Prieur, 1104.

Louis XIII (1610–1643)

(*e*) *Quart d'écu de Béarn*, date illegible and (?) Morlaas, cf. Hoffman, 47.

The obvious explanation would be that these coins are being washed up from a wreck, but my colleague Dr J. P. C. Kent has reminded me that for a short time at the beginning of the reign of Charles I the French *quart d'écu* or 'Cardecue' was legal tender in Great Britain, illness at the Royal Mint having delayed the recoinage of Henrietta Maria's dowry. The importation of the 'Cardecue' by private persons, however, was strictly forbidden, and so there is the intriguing possibility that the coins may be from a smuggler's cache or even a capsized boat. Can any reader with local knowledge inform me if in the second quarter of the seventeenth century there were any notable wrecks or clashes with the precursors of the coastguard on the shores of Hayling Island?

R. H. M. DOLLEY

ANSWERS

2. (1958.) Origin of names. Derivations of many East Coast and Thames Estuary sand and channel names were examined by Dr Muir Evans in articles contributed to Vol. xv (1929) and Vol. xvi (1930). Certain of Dr Evans's derivations need further consideration, particularly his note on the Spaniard sand[1] off Sheppey. This he thought might be connected with the 'Spanish Sand Hills' near Ostend, mentioned in Norie's *New Seaman's Guide and Coaster's Companion*, 1826.

PHILIP KERSHAW

1 See also: Muir Evans, *A Short History of the Thames Estuary*, London, n.d. (1936?), pp. 13- 4.

16. (1959.) TITLES OF RANK. The prefix *Master* has been discussed on several occasions in *The Mariner's Mirror*, but *skipper* and *tugmaster* have never been brought up before.

Etymological authorities are in agreement that *skipper* is the proper prefix for the captain of a keel or coal barge and in its enlarged sense, the master of a small merchant vessel. *Skipper* is derived from the Dutch *schipper*, a shipmaster, although the identical spelling and meaning is found in both German and Flemish. In Danish it is *skiffer*.

When *skipper* first appeared in English I am unable to establish but it is found in a poem by Sir Patrick Spens:

'The King sat in Dunfermline tower,
Drinking the blood-red wine;
Oh whaur'll I get a skeely skipper,
To sail this ship o'mine.'

To understand better the prefix *tugmaster*, it is desirable to briefly touch on tug, tow, tugboat and towboat as they are all closely related.

To tow, to tug are both derived from the German *tau*, a cable. Swedish *tog* or *täg*; Gothic *tuikan*, to pull or tug. In Swedish, *tog* is the substance of which rope is made. In Scotch, *tow* is a rope.

Volume 5, *Scottish Antiquary*, attributes the origin of the word *tug* in its present use in tugboat to the following tale:

'When the Forth and Clyde canal was first opened, they found that barges which carried goods on it were unfitted for the navigation of the Forth between Leith and Grangemouth. This was in 1817. Some man built a small steamer and by means of it, began tugging a string of barges up the Forth. Proud of his invention, he named his vessel *The Tug*, little dreaming that it would form the general name for those to follow.'

Tugmaster would therefore mean the master or captain of a small powerful vessel used in towing or tugging and in a broader sense, the master of a fleet of tugs. EDGAR K. THOMPSON

In the example quoted, in which one Medway barge master was referred to as 'master' and another as 'skipper', I see no logical reason for differentiation. Both would have been better described as 'barge master'. News reports occasionally refer to barge masters as 'captains', but Smyth is probably correct in defining: 'Captain of a Merchant Ship as "a *certificated* officer... intrusted with the entire charge of a *ship*..."' (*Sailor's Word-Book*, 1867). Italics are mine.

P. KERSHAW

10. (1960.) PORTUGUESE MAN-OF-WAR. This pleustonic jellyfish sails close-hauled at the sea surface, thus being able to feed from a much greater volume of water than if it merely drifted to leeward. Its sail somewhat resembles a lateen, and the *O.E.D.*'s earliest citation, from Sloane's *Jamaica* (1707), calls it 'a caravel or Portuguese man-of-war'.

Compare the account of Captain White in *The History of the Lives and Bloody Exploits of the Most Noted Pirates*, which also dates from the early eighteenth century, and in which the pirates mistook '13 sail of Moor ships' at the mouth of the Red Sea (doubtless dhows) for 'Portuguese men-of-war'. It would appear that on deep water around 1700 the recognition feature of a Portuguese warship was her lateen rig.

JOHN LYMAN

11. (1960.) PORTUGUESE MAN-OF-WAR FISH. *Nomenus* lives in symbiosis with *Physalia*, the Portuguese man-of-war, being immune to its sting.

JOHN LYMAN

12. (1960.) MAN-OF-WAR BIRD. Linnaeus named this bird *Pelecanus aquilus* (black pelican) in 1758, and the modern generic of *Fregata* is clearly derived from the vernacular. The name 'man-of-war bird' goes back to 1657; the *O.E.D.*'s 1738 citation for 'frigate bird' says 'the Indians call it so because of its swiftness of flight'.

JOHN LYMAN

6. (1960.) SERPENTINE GUNS. These weapons were called *orgelgeschütz* in German. They were made of cast iron, each with five muzzle-loading barrels mounted on the trunk of a tree and moved on two round disks of wood for wheels. A. Demmin, in *Weapons of War*, mentions a variation of this cannon called in German *todtenorgel*, death organ, which could be fired in succession or all at once. This weapon came into vogue during the fifteenth century. It was not sinuous in shape and its name was probably derived from the fact that, like a serpent, it was diabolic.

EDGAR K. THOMPSON

In a list of Elizabethan naval guns compiled by Sir Laird Clowes, a 'serpentine' is shown as being 1·5 inches in calibre, weighing 400 lb. and firing a 0·3 lb. shot. However, serpentines were pre-Elizabethan weapons, and I doubt if such specific data could be said universally to apply to the weapons so-named in earlier times. I suggest that serpentine was a name which originally was applied to firearms equipped with a firing device which utilized a 'cock' or 'serpentine' match holder. This device was developed *c.* 1425 (some say later) for use on the fore-runners of the German 'Hackbuts' and French 'arquebuses'. The *Oxford Universal Dictionary* identifies the word as first used in English to denote a 'cannon' in 1450, which tends to coincide with the coming of the serpentine match holder into general use. Ordinance authorities are usually rather vague in their mention of serpentines, sometimes they idenify it with a small calibre swivel-mounted gun. Among the weapons listed for the English royal ship *Regent* of 1489 were 225 'serpentines'. Such a large quantity certainly suggests that these were small in size and, I suspect, they were, or included, hand guns for individual soldiers. If I am right that serpentines were equipped with serpentine match holders, then they were not what we today think of as cannon. For cannon continued to be fired by hand-applied matches until long after the term 'serpentine' had been dropped from the ordnance vernacular. I fear all that anyone to-day can say with reasonable certainty is that a 'serpentine' was a small calibre nondescript firearm of the fifteenth and early sixteenth centuries.

TOM GLASGOW JR.

7. (1960.) ROBINSON CRUSOE. Mrs Roberts's friend is probably thinking of the adventures of Pedro Serrana which are recounted in Volume 41 of the Hakluyt Society. This tale was originally published in Spanish and was not translated for centuries. It is doubted if Defoe was acquainted with it at the time he wrote *Robinson Crusoe*. In brief, the tale concerns a shipwrecked mariner who reached an uninhabited island in the Caribbean by swimming when his ship was lost near the island. Serrano lived for seven years on this island which had neither wood nor water. He existed on shellfish and turtles and used the shells of large turtles to catch rainwater and to construct a shelter. After three years he was joined by another shipwrecked sailor and both shared this lonely existence until they were rescued about 1550 by a passing ship. Serrana's companion died on the voyage back to Spain, Serrano lived to an old age and eventually died in Panama. Serrana Bank, the small island on which this mariner lived for seven years, is located between Jamaica and the coast of Central America and was named in his honour.

Disucussions prevail to this day as to who was the prototype of Defoe's romantic tale. Dampier and Ringrose record several instances of marooned seamen and the adventures of Alexander Selkirk on Juan Fernandez (*mas a tierra*) are too well known to be mentioned here.

The November 1959 issue of *History To-day* discusses Robinson Crusoe in some detail.

EDGAR K. THOMPSON

Defoe was probably acquainted with the story of Pedro Serrana, a Spanish seaman, castaway on what came to be called, from this circumstance, the Banco Serrana, a cluster of small sandy cays, a few feet high and extending over an area some twelve miles in length, lying in the Caribbean in lat. 14° 20′ N., long. 80° 20′ W.

Serrana's account of his experience was preserved in the 'Comentarios Reales' of (El Inca) Garcilaso de la Vega (1609), translated into English by Sir Paul Rycaut and published in 1688. In all likelihood Defoe knew this book, but the few pages describing Serrana's wretched existence for seven years (four of them with a fellow castaway) on his sandbank can hardly have afforded him more than a bare hint for his romance.

REX CLEMENTS

REVIEWS

The Call of High Canvas. By A. A. Hurst. London: Cassell. 270 *pages, frontispiece, and* 32 *pages of half-tone illustrations.* Price 30*s.* net.

Of books on the sea and the writers thereof if has often been said that those who write do not know, and those who know do not write. Happily there are many exceptions to the rule, and the author of this book is one of them. He certainly does know, for he has served his time in sail, and in a variety of ships from four-masted Cape-Horners, to jury-rigged racing yachts, and an unseaworthy and ill-found old schooner laden with pleasure-seeking (God Save the mark) holiday makers of both sexes.

And he can write, this man. There is nothing better to be found in the pages of Conrad, or any other writer of the Sea, than some of his descriptive passages. His great love of the sea in all its varying moods: easy days of sunshine in the Trade winds, or the harsh back-breaking hours of struggling with frozen, fighting canvas, down off the pitch of the Horn, he describes it all in beautiful prose.

Of course there is nothing in all this that every sailor (that is every square-rigger sailor) has not encountered, perhaps many times, in his life at sea; but no-one that I know has ever made a better story of it.

The author also has much to say about the great sailing ships of by-gone days, of their crews and rigs, and the famous passages they made, and something also of the more modern steel 4-posters such as the Flying 'P's', than which no finer or more powerful sailing vessels ever sailed the Ocean. That one of them, the *Pamir*, foundered in an Atlantic hurricane, was through no fault of the ship. She could have weathered any storm that ever blew; but an ill-stowed and dangerous cargo, and perhaps inexperienced handling, are matters that her builders and designers cannot be held responsible for.

A. MACDERMOTT

Manual of Seamanship, Vol. I. Her Majesty's Stationery Office. New edition 1957. Price 10*s.* net.

The original 1951 edition of this work was reviewed in these pages in February 1952, and what ever was said then in praise or criticism is still pertinent, but with a few modifications. A note on the subject was contributed to this *Journal* in November 1957 by our distinguished and experienced member Captain A. MacDermott, R.N., drawing attention to chapter 11 and the section on sailing vessels. As he rightly says, this part of the book might have been better left out; I doubt whether junior officers and ratings in the Service require anything of the sort to-day. The new edition is issued in order to incorporate Amendments Nos. 1 to 4 that have accrued since the volume was first published, one reason being attributable to the Accession of H.M. the Queen, and the necessity to change such things as the crown in different flags, that emblem now being St Edward's instead of the Tudor form. There are some minor alterations, such as the reversion once more to the former convention of calling the soundings, 'deeps' being again sung out without the prefix '*By the* deep...'. In the description of semaphore, references to numerals are omitted, making it appear as if numbers can no longer be signalled by their earlier appropriate signs; what a complication if numbers in future are *all* to be spelt out. By the way, in the specimen examination questions at the end, this alteration has not filtered through. It is satisfactory that Lieutenant Pasco now has his name spelt aright, but the confused, nonsensical and unnecessary matter to do with the history of signals and the telegraph remains as before. There is a fresh coloured pull-out illustration of buoys and buoyage, caused presumably by a change to the universal system, though I could find nothing in the text to explain such a change.

The book is not quite up-to-date, for it states that it is intended for naval cadets and seaman boys, but as everybody knows, that abominable and derogatory word 'boy' has been expunged from the Service vocabulary and is to be prohibited in future. There are references to boys, too, in the text, and on page 80, the gunroom, midshipmen and certain warrant officers are mentioned though they were all abolished some time ago. These are small details. What, however, can have induced the authors to have scrapped the former picture of a four-masted sailing vessel, and to have substituted the drawing of H.M. Brig *Martin*; she is described as of 41 guns, which in charity we might put down to a misprint, but there seems little excuse for the other blunders in nomenclature so much lamented and deplored by Captain MacDermott.

P. H. MEAD

A Social History of the Navy 1793–1815. By Michael Lewis. London: Allen and Unwin. $8\frac{3}{4} \times 5\frac{3}{4}$ *inches.* 468 *pages; plates; tables; bibliography; index.* Price 42*s.* net.

As Professor Lewis reminds us, until a few decades ago, what people knew as the 'Great War' was the long span of hostilities with Revolutionary and Napoleonic France which stretched, with two brief breaks, from 1793 to 1815. It was indeed 'great' by any standard, and it saw the Royal Navy rising to a peak of fame under such leaders as Howe, Hood, St Vincent, Cornwallis, Duncan, Nelson and Collingwood. There never was such a Navy before. There never will be such another again. It was as unique as it was curious.

It is this Service which Professor Lewis has chosen as the field of study in his new book—not its actions, which figure large in his *History of the British Navy*; not its armament and tactics, of which he has treated in his *The Navy of Britain*; not even its higher government, but its human constitution and its working parts. The questions he has set himself to answer are as follows: What were the ranks and responsibilities of its officers and men? How were they recruited? Whence did they come? How did they rise in the Service? How were they rewarded? What was their ultimate fate? There are, in addition, long asides, such as a valuable analysis of the causes of ship-losses—so small a proportion being due to enemy action as to be positively astounding.

The material on which Professor Lewis's descriptions and conclusions are based is mainly to be found in the series of publications of the Navy Records Society, and in those two 'post-war' compilations to which every student of the period is indebted: John Marshall's *Royal Naval Biography* of 1823 and William O'Byrne's *Naval Biographical Dictionary* of 1849. Not everyone may realize the fact that some of O'Byrne's source material is in the British Museum, and it occasionally includes odd details not in his published record. Add. MS. 38048 f. 5, for instance, contains an account of his naval services by Frederick Marryat, the leading novelist of the navy about which Professor Lewis writes.

Professor Lewis has made the utmost use of Marshall and O'Byrne, indeed it is difficult to see how they could possibly have been squeezed harder, or to better purpose, in order to present the reader with a picture of a fighting fleet in its entirety, with its crusted traditions, its often bland defiance of official regulations, its rigidity in custom, its pragmatism, and its ability to make the most of a weird and utterly illogical series of oddities in nomenclature and indeed in rank. Like Topsy, they grow'd!

There is, incidentally, a certain amount of overlapping with material which is already included in the author's *England's Sea Officers* but this matters not a scrap, first because the book is freshly thought out, and also because the naval profession is viewed herein as a *whole*, wardroom, gun-room and mess-decks entire, at a highly significant period, a feat which has not been attempted before. It is all so thoroughly done that it would be a blessing if other professions, e.g. the Church, the Law, and the Army, could be treated, historically, in just this way. It also tempts the reflexion that many learned books fail because they try to do too much. This one is never over-loaded, never ventures an idle speculation, never strays from the point. In fact Professor Lewis, by mastery within a given field, by concentration, and by unfailing clarity, presents a survey of a living Service

bright in its detail, complete in its persuasion, and worthy of a place beside his own earlier books. This is high praise, and it is meant to be, since practical use of the 'Lewis Series' has proved them invaluable.

OLIVER WARNER

A Memoir of James Trevenen. Edited by Christopher Lloyd and R. C. Anderson. Navy Records Society. 9 × 6¼ *inches;* 248 *pages; portrait; map; index.* Vol. ci. Price 45*s.* net.

The hundred and first volume in the Navy Records Society Series is of note for a wide diversity of reasons. The subject of the Memoir, edited by Professor Lloyd and Dr Anderson, died of wounds in 1790 while in Russian service, at the age of thirty-one. His life was written by his brother-in-law, later Admiral Sir Charles Vinicombe Penrose, in a style of excessive wordiness, but largely from original material. This has now been skilfully used.

Trevenen has considerable claims to attention. He recorded his views, briefly but with point, of the Naval Academy at Portsmouth, where he had education, if that is not too grand a word for what he received. Not a great deal is known about this institution, and most of that is bad. It cannot be said that Trevenen alters the accepted view.

As a midshipman, Trevenen had the good luck to be appointed to Cook's third world voyage, and his notes on that great man—they are, alas, no more—add something to the store of knowledge, and they reinforce the more formidable portrait of a stern and choleric officer, often harsh in his discipline, yet on rare occasions able to unbend, and with an undoubted feeling for the young.

His circumnavigation brought Trevenen promotion, and his next claim to interest is that he served with Captain James King (to whom he remained devoted) under Nelson, in the abortive attack on Turks Island in the West Indies in the year 1783, when Nelson was captain of the *Albemarle*. Trevenen's comment on the affair was unsparing. It was, he says: '. . . ridiculous . . . undertaken by a young man merely from the hope of seeing his name in the papers, ill depicted at first, carried on without a plan afterwards, attempted to be carried into execution rashly because without intelligence, and hastily abandoned at last for the same reason that it ought not to have been undertaken at all. . . .' Judgements such as this reinforce the view that Nelson learnt the hard way.

Despairing of higher promotion in the British service, despite the handsome way in which Cook's officers were usually treated, as were Anson's in an earlier time, Trevenen decided to seek his fortune in Russian service, and a large part of the volume is taken up with an account of his experiences in the war with Sweden, 1788–89 and at the Battle of Viborg. This part of Trevenen's life is sad. He was unlucky, frustrated, ill-backed, as was so often the case with British sea officers enjoying grander rank in less efficient navies.

A final claim to interest is Trevenen's glimpse of Sir William Sidney Smith, so scornfully referred to by those who did not like him as 'the Swedish Knight'. Smith was then occupying a typically ambiguous position as 'adviser' in the Swedish flag-ship, and talking himself into the centre of affairs as indefatigably as ever.

OLIVER WARNER

JOURNALS RECEIVED

The Ditty Box. Editor S. A. E. Ström. Ship Lovers' Society of Victoria, 1955. 6½ × 4½ *inches;* 144 *pages, illustrations in the text.* Price 4*s.* 6*d.*

This is the Journal of the Shiplover's Society of Victoria in association with the New South Wales, Western Australian, Tasmanian and South Australian Societies. It is published annually and in its pages every endeavour is made to stimulate an interest in the Royal Australian Navy and Merchant Service. The Society, which has just celebrated its Silver Jubilee, aims also at establishing

a Maritime Museum in Australia. Miss Ström, the editor for the past nine years, has the distinction of being the first woman President of any Shiplovers' Society.

BULLETIN OF THE NEW YORK PUBLIC LIBRARY. Vol. 59. November 1955. 10 × 7 *inches;* 43 *pages.* Price 25 cents.

This issue contains Part IV of Crossing the Line; Tales of the Ceremony during Four Centuries by Harry Lydenberg.

IN RETROSPECT, 1938–1955. Liverpool Nautical Research Society. $8\frac{1}{2} \times 6\frac{3}{4}$ *inches;* 34 *pages.*

This little pamphlet provides a very interesting outline of the foundation, growth and achievements of the Liverpool Nautical Research Society of which our member Mr R. B. Summerfield is Chairman. It contains also a list of past and present officers of the Society, together with a list of the present members. Applications for membership should be addressed to Miss E. M. Hope, Summerfield and Lang, Exchange Street, Liverpool 2.

G. R. G. WORCESTER

EXHIBITION

SHIP MODELS AT THE PARKER GALLERY

The exhibition of ship models by Donald and Iris McNarry, held at The Parker Gallery during May, was a notable landmark in the history of ship-modelling. It introduced the miniature ship model, a type which is not too well known or appreciated by those who usually take an interest in ship models.

During the Napoleonic period, when the prisoners-of-war were making their exquisite bone models, the art of ship-modelling in miniature appeared, and became very highly developed, some of the models being incredibly small and detailed. I remember seeing one from The Parker Gallery, of a three-decker fully rigged, made chiefly of wood, and enclosed in a tiny hexagonal case of only about $2\frac{1}{2}$ in. diameter and $2\frac{1}{2}$ in. high—a most amazing piece of work.

For the next hundred years or so the art seems to have been entirely neglected, practically all the ship models being of more normal size. From about the 1920's miniature ship models began to appear at the 'Model Engineer' Exhibition, and possibly elsewhere. One of the best of these was a tiny model of the famous *Mauretania* by Mr G. H. Draper. Another notable modeller in miniature was Mr Charles Hampshire who worked to the scale of $\frac{1}{64}$ in. = 1 ft. Some of his models are to be seen at the Institution of Marine Engineers, of which he was a member, and one was presented to H.R.H. the Duke of Edinburgh in 1954 by the House of Commons Yacht Club. Hampshire had the artist's approach to ship-modelling and was one of the first to set his model in a realistic sea. In his day he was undoubtedly the leading exponent of the art.

Mr McNarry began exhibiting his models at the 'Model Engineer' Exhibition in about 1935, in the junior section, one of his earliest models being that of the 3 m. barque *Favell,* which he made from a series of articles in the magazine *Ships and Ship Models.* It was exhibited in the Exhibition under review, along with an even smaller model of the same vessel made in 1955, showing the development in his technique during twenty years. In 1947 McNarry exhibited his model of the liner *Stirling Castle,* which was awarded the Championship Cup for steamship models, a group comprising many larger and, in their way, more impressive and more ambitious models. This model was soon acquired by the Union Castle Company, and now occupies an honoured place in their boardroom. Every year McNarry has exhibited models in the 'Model Engineer' Exhibition and, after winning the highest awards with almost monotonous regularity, now exhibits in the Loan Section.

From time to time Mrs McNarry has exhibited models, and when her exquisite model of Brunel's *Great Western* appeared in the 1950 Exhibition it was considered by the judges to be, in some respects, a better model than her husband's *Caronia*, which appeared in the same exhibition. The neat finish was quite up to her husband's standard, and the gilded figure-head and the bow decoration were very daintily done. There were four of Mrs McNarry's models in the exhibition under review, the *Great Western* already mentioned, a Cornish lugger of 1800, a Thames spritsail barge, and Bell's paddle boat *Comet*. The *Comet*, whilst not a glamorous subject for a model, was very convincing and must have entailed a lot of research.

If there is one thing more than another in the work of these two ship-modellers, apart from their amazing skill in detail work, it is their thoroughness. The initial research is thorough, the materials are of the best, the details are accurate and complete, the rigging is fully detailed and proportionate (some of the 'ropes' are only 0·55 thousandths of an inch in diameter), the painting and general finish is perfect, and the 'seas' are appropriate and realistic. These are the qualities which have won for Mr McNarry his position as being the best miniature ship modeller of the day.

The cases reflect the same temperament. Each one is different and each one is made to suit the model. A wide variety of woods is used, and full advantage is taken in finishing and polishing to bring out the beauty of the grain. Some cases are black—one in particular I noticed was that for the *Caronia*, which was of black stained sycamore with chromed metal work, and emphasized very effectively the pale green tones of the model. Remarkable, too, was the wide variety of ships represented in the exhibition. The models represented the old wooden walls, the later sailing ships, steamships, both historical and recent, and, in fact, gave ample proof of the builder's wide knowledge and interests.

One of the more impressive models was that of H.M.S. *Britannia* of 1682 made to the scale of $\frac{1}{16}$ in. = 1 ft., instead of the builder's more usual scale of $\frac{1}{50}$ in. With its richly decorated hull and its lively sea it was perfect both as a ship model and as a sea picture. A somewhat similar model was that of the *Grosvenor* which showed to the full the magnificence of the old East Indiaman. Of a different type but equally beautiful was the model of the old Union liner *Scot*, with its slender lines, clipper bow, and general yacht-like appearance. Different again were the three Navy Board models, two of the *Prince* of 1670 to different scales, and one of the *Rupert* of 1666. These were almost too jewel-like to be ship models. An interesting model was that of the *Great Eastern* shown as a cable-laying ship. It was about 22 in. long and was full of valuable deck detail. At the other extreme was the model of a Flemish carrack, which brought to life the well-known engraving by 'WA'. There were many other models which I would have liked to discuss but space forbids, although each one was full of interest and charm.

The exhibition as a whole reflected great credit on the organizers. The models were well displayed, at a convenient level for viewing, and the individual lighting was ideal for inspecting the small detail, and this was further assisted by the provision of a large magnifying glass.

EDWARD BOWNESS

PRESENTATION TO DR R. C. ANDERSON ON HIS RETIREMENT FROM THE PRESIDENCY

The Society's members will no doubt like to know that the appeal made for this purpose was most generously subscribed to. In all, £141 16*s*. 4*d*. was received.

The gift took the form of a framed portrait of our late President in oils by Mr Bernard Hailstone. This was presented at the Annual General Meeting held at the National Maritime Museum on Wednesday, 8 June, and the small residue of the sum subscribed has since been handed to Dr Anderson.

The following other publications of the Society are at present available for sale:

OCCASIONAL PUBLICATIONS: No. 5, *Lists of Men-of-War*, 1650–1700. *Part I. English Ships.* Compiled by R. C. Anderson. *Part II. French Ships.* Compiled by Pierre Le Conte. *Part III. Swedish Ships.* Compiled by Hj. Börjeson. *Danish-Norwegian Ships.* Compiled by P. Holck. *German Ships.* Compiled by W. Vogel and H. Szymanski. *Part IV. Ships of the United Netherlands.* Compiled by A. Vreugdenhil. *Part V. Indexes.* EACH PART 3*s.* 6*d.* (POSTAGE 5*d.*). No. 6. A Treatise on Shipbuilding and a Treatise on Rigging written about 1620–1625. Edited by W. Salisbury and R. C. Anderson. 15*s.*, to members 12*s.* 6*d.*, POSTAGE 4*d.* No. 7. List of English Men-of-War, 1509–1649. Compiled by R. C. Anderson. 3*s.* 6*d.* (postage 4*d.*)

THE MARINER'S MIRROR. INDEX TO VOLS. 1–35. Compiled by R. C. Anderson. Price 15*s.* (Members' rate 10*s.* 6*d.*, POSTAGE 10*d.*).

REPRINTS: *The Rye River Barges*, by Leopold A. Vilder.
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The World's First Clipper, by Boyd Cable.
The Monuments in the Church of St Nicholas, Deptford, by John Summerson.
The Battle of Trafalgar, by Rear-Admiral A. H. Taylor, Price 5*s.*
The Curraghs of Ireland, Parts I, II and III, by J. Hornell. Price: Part I, 2*s.*; Parts II and III, 2*s.* 6*d.* each.
British Coracles, Parts I and II, by J. Hornell. Price 2*s.* 6*d.* each.
Types of British Coastal Craft of the British Isles. Price 1*s.*
The Boats of East Pakistan, by Basil Greenhill. Price 5*s.*

MARITIME MISCELLANY SERIES, No. 1, *The Van de Veldes*, by W. Voorbeytel Cannenburg. No. 2, *Piracy*, by Phillip Gosse. Price 2*s.* No. 3, *The Anchor*, by J. W. van Nouhuys. No. 4, *Old Maritime Prints*, by A. G. H. Macpherson. No. 5, *The Timber Problem of the Royal Navy*, 1652–1862, by Robert G. Albion. Price 2*s.* No. 6, *The Fighting Ship from* 1860 to 1890, by Admiral G. A. Ballard. No. 7, *The King's Flags*, by Cecil King. No. 8, *The History of Maritime Law*, by William Senior. Price 2*s.* No. 9, *The Development of Signalling in the Royal Navy*, by Captain L. E. Holland, R.N. No. 10, *The Ship of the Renaissance*, by R. Morton Nance. Price 5*s.* No. 11, *Rig in Northern Europe*, by Sir Alan Moore, Bt. Price 5*s.* No. 12, *Merchantmen under Sail* 1885–1932, by the late Basil Lubbock. Price 5*s.* (Each, price 2*s.* 6*d.* except where otherwise stated.)

PLANS: Model-maker's Plans of the *Victory*, 10 plans on 3 sheets from those used in the restoration of 1923–35. (Price 21*s.*)

Enquiries for any of these should be addressed to The Hon. Secretary, Society for Nautical Research, National Maritime Museum, Greenwich, S.E. 10.

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